Exploring variations in mental health service use by men from an intersectional perspective

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Overview

This thesis explores mental health service use by men and considers the extent to which intersectional theory can expand and add further nuance to current understanding. Part 1 provides a conceptual introduction which will explore current theory in this area and identify where gaps lie in the literature. It will begin by outlining current knowledge about men’s reticence to use mental health services. Limitations in this body of work will be highlighted, from which the case is made for more intersectional work to explore whether other facets of social identity may simultaneously influence men in varying ways. Rare examples of existing intersectional work in this area will be critically considered. Part 2 presents an empirical study designed to investigate whether the mental health service use of men, differentiated by a range of social status indicators, varies systematically at multiple points along the treatment pathway. Associations will be explored using both regression modelling and latent class analysis; the former treats individual indicators independently, whilst the latter allows for multiple indicators to be used simultaneously in line with intersectional principles. The results reveal significant inequities in men’s mental health service use by ethnicity, religious group and markers of socioeconomic status and thereby strengthen the case for future research and clinical services to apply an intersectional lens when considering the mental health needs of men. Part 3 is a critical appraisal of the process of undertaking research for the doctorate in Clinical Psychology. Reflection is given to the process of applying for NHS ethics and to the value of routinely collected data.
Impact Statement

The results from this thesis have potential to be of both academic and clinical value. The conceptual introduction aims to provide a comprehensive synthesis of the existing literature on men’s mental health service use and, in doing so, will identify gaps in the knowledge base and summarise recommendations which have been made for the direction for future research. Emerging as important is the need for more studies which utilise diverse samples of men and are designed in a way which recognise gender as a social construct which likely intersects in complex ways with other facets of social identity. Also apparent is that although the intersectionality framework is well placed to inform this endeavour, it has more commonly been applied to qualitative work and often the population of focus has been marginalised groups of women. Quantitative intersectional work which seeks to explore men’s mental health service use is rare and as such, little is known about which groups of men are most vulnerable to lower service use.

The empirical study was designed to meet the gaps in the literature highlighted within the conceptual introduction. The study findings demonstrate intersectional influence in men’s mental health service use and therefore reinforce the need for future research to be designed with this framework in mind. The use of latent class analysis as a methodology to examine the simultaneous impact of multiple social identity indicators in relation to mental health service use is novel. The benefits and challenges which were encountered in relation to utilising this method may help inform decision-making regarding the design of future quantitative intersectional work.

Regarding the clinical value of the thesis. The findings highlight significant inequities in service use by certain groups of men. These results will be fed back to clinicians working within the services from which the data was drawn. By providing evidence of which male subgroups are most at risk of discontinuing treatment,
informed discussions about possible ways to tackle this issue can be had. More broadly, there is encouraging evidence that tailoring mental health services to better align with the distinct needs of underserved groups is effective in reducing existing disparities. The findings here provide further empirical justification for the implementation and evaluation of such adapted interventions whilst also suggesting that caution is needed to ensure that, with the gaining momentum there is towards adapting services for specific groups, there is equal recognition of the intersectional variation that exists within these groups. A balance is needed which reflects the need for services to make adaptations for underserved groups whilst also recognising that each client should be assessed and treated as an individual with unique needs.
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Part 1: Conceptual Introduction

Exploring men’s mental health service use from an intersectional perspective
Introduction

This extended introduction will provide an overview of key concepts and debates in the literature relating to men’s mental health service use. In doing so it aims to highlight gaps in current understanding which warrant further empirical investigation. It will begin by providing justification for why the mental health service use of men is of interest, with men’s distinctive mental health needs and patterns of service use outlined. Next an overview will be given of how mental health service use has been operationalised in a variety of ways and has attracted different explanatory frameworks. These frameworks will be evaluated to highlight relative strengths and limitations which are born out in associated empirical research. In doing so the case is made for future research to develop more refined service use measures. Current explanations for men’s differential service use will then be summarised. In comparison with the body of work which exists on the influence of traditional masculine norms on help-seeking, relatively little work has been done to explore within group variability of men in relation to their mental health and service use. Instead, there has been a tendency to treat men as a static homogenous group, a problem exacerbated by an overreliance on data drawn from young, White student samples. Other potentially relevant facets of men’s social identity in relation to mental health service use will be outlined with reference to the social determinants of mental health literature. The concept of intersectionality and related methodological considerations will be presented as a unifying framework with the potential to bring together mutually constitutive identity components which reflect both privilege and disadvantage operating simultaneously and introduce greater nuance to empirical research findings. The final section explores the extent to which intersectionality has been applied to the study of men’s mental health service use.
Men’s mental health

Gender has traditionally been treated as the preserve of women in much research investigating the interactions between society and health (Möller-Leimkühler, 2003; White & Richardson, 2011). Compared to men, women are often perceived to suffer from greater ill health and be disadvantaged by multiple social roles. Consequently, research on men’s mental health is relatively new, especially outside of the U.S. However this is starting to change and there have been calls to move on from treating men as the normative and relatively decontextualised referent group to women, but rather as equally subject to complex social processes which can be health depleting as well as health promoting (Addis, 2008; Levant, 1996).

Prevalence and impact

Epidemiological findings, which have consistently highlighted an increased incidence and prevalence of certain mental health problems for men compared to woman, provide urgency to this agenda. Men are more likely to commit suicide, with cross-national data analyses showing the suicide rate of men compared to women is 3.0 to 7.5 times higher (Bilsker & White, 2011). More specific to the UK context, a recent report from the Office of National Statistics (ONS) indicates in 2018 the male suicide rate was 17.2 deaths per 100,000; for females, the rate was 5.4 deaths per 100,000 (Office for National Statistics, 2019). Likewise, despite some international variation, elevated rates of substance use disorder have been found in men compared to women (McHugh et al., 2018). Yet despite this, the research indicates lower rates of common mental disorder (CMD) amongst men compared to women at a rate of approximately 2:1 (Affleck et al., 2018). Given depression is highly indicated within suicide (Miret et al., 2013), there have been calls the apparent paradox of low depression and high suicide rates in men to be investigated (Bilsker & White, 2011).
Studies across Western countries consistently find that, irrespective of need, men are less likely to seek help when they become mentally unwell compared to women (Addis & Mahalik, 2003; Andrews et al., 2001; Galdas et al., 2005). For example, data from the US National Comorbidity Survey indicated that women are 1.6 times more likely to receive any form of mental health treatment compared to men (Wang et al., 2005). Likewise, a Canadian study drawing data from the Ontario Health Survey found that female gender remained positively associated with outpatient mental health service use (OR=1.7 (95% CI= 1.2; 2.4) (Rhodes et al., 2002). Men make up 35% of referrals into the Improving Access to Psychological Therapies (IAPT) services nationally, with these services providing the majority of evidence-based psychological interventions for depression and anxiety disorders in the UK (Baker & House of Commons Library, 2020).

Once in treatment, several studies report higher dropout rates for men. For example, a retrospective case-control study using data from four public outpatient psychiatric centres services in Madrid, found that male gender was one of the risk factors (OR=1.43 (95% CI=1.07; 1.91) associated with treatment drop-out (Reneses et al., 2009).

Qualitative research lends itself to the study of service use from a more interpersonal and intentional stance, which includes the extent to which the patient occupies an active and collaborative position to the process. Research here suggests that men reach treatment via different pathways to women and feel less able to fully engage in the process. For example, a Canadian study which used in depth interviews of 38 men who self-identified as experiencing depression, found that these men only sought help after exhausting all other avenues. Additionally the men described a reluctance to speak openly about their distress with health care
professionals and tended to minimise their symptoms and need for help (Johnson et al., 2012).

Overall, however, findings about men’s use of services once treatment has been initiated are less consistent than findings regarding the relationship with initial help-seeking. As will be outlined in the next section, service use has been operationalised in numerous different ways and attracted various terminology. It is likely that some of the inconsistencies found in relation to gender differences may reflect this.

Either way, the endeavour to understand differential engagement with services is important one. Poor engagement and compliance with psychological interventions adversely affect clinical outcomes. Research has demonstrated that missed appointments have been found to be negatively associated with clinical outcomes (Clark et al., 2018) and clients who terminate therapy prematurely may be at greater risk for completed suicide (Dahlsgaard et al., 1998).

In summary, it is well established that the prevalence of certain mental health problems differ between men and women and rates of help-seeking are lower amongst men. Less is known, however, about men’s patterns of engagement once they are in contact with services. The next section will provide theoretical context to this gap in the literature by critically considering how service use has most commonly been conceptualised.

**Service use**

*Domains of service use*

Service use encompasses three distinct focal points: access, utilisation and quality. Access refers to the opportunity for use of services and involves factors such as service availability and sufficient resources (financial, personal or organisation) to enable use (Gulliford et al., 2002). Utilisation refers to the actual use of services.
Whilst utilisation has been described as evidence of access (Donabedian, 1972), it is nevertheless distinct, because not all those with access to services choose to use them. Experiences using services will differ systematically, which can have an impact upon clinical outcomes, which is why quality is an additional domain to consider in equity evaluations of service use.

Although these terms are conceptually distinct, in practice they are often used interchangeably. To muddy the waters further, terms such as ‘help-seeking’, ‘drop out’, ‘engagement’ and ‘disengagement’ are also commonly used yet can be poorly defined and used interchangeably within the literature. It has been argued that ‘engagement’ with mental health services is a complex phenomenon to measure as it refers to the process of using services. For example, although attendance rates are often used a proxy for engagement, it is possible to attend whilst feeling ambivalent towards treatment. It follows that ‘engagement’ encompasses factors such as therapeutic alliance, shared goals, and satisfaction with help received (O'Brien et al., 2009).

**Theoretical approaches to service use**

*Andersen’s behavioural model*

Originally conceived of in 1960’s and revised many times since, Andersen’s behavioural model of healthcare access is one of the most widely cited and extensively applied models of service use (Andersen, 1995). It suggests that people’s use of health services is a function of i) predisposing characteristics, ii) enabling resources and iii) their need for care. ‘Predisposing characteristics’ include ‘demographic’ characteristics of age and sex as “biological imperatives” (Andersen et al., 2013), ‘social structure’ factors such as education, ethnicity and occupation, and ‘health beliefs’ which might influence how individuals view their own health and
subsequent need for health services. ‘Enabling resources’ are those that impede or facilitate service use and are presented as stemming from either the ‘personal/family’ domain or from the ‘community’. ‘Need’ is conceptualised as both ‘perceived’ need - how people view their own health and functional state, and ‘evaluated’ need - reflecting a professional’s objective assessment of an individual’s health and need for healthcare.

More recently, the model has been revised to be multilevel so that predisposing, enabling and need factors also contain contextual components (Andersen et al., 2013). For example, contextual predisposing factors may be demographic compositions at the community level (e.g. census area deprivation level) and culture norms around help-seeking. Contextual enabling factors may be healthcare policies, financing, and provision of facilities. Contextual need factors may include population health measures (e.g. morbidity/mortality rates) or environmental health indicators (e.g. occupational, crime-related injury).

Andersen’s model provides a comprehensive inclusion of multilevel components that influence service utilisation. This encourages service use to be viewed as a complex phenomenon, reflecting the interplay of wide-ranging factors.
from individual biological and social needs to broader population and provider systemic factors.

The model can be criticised for the linear and categorical approach it applies to the predisposing, enabling and need factors. These factors are often mutually reinforcing or overlapping. For example, education is conceptualised as a predisposing factor determining need and enabling resources, however, it could conceivably be an enabling factor of its own right, improving a person’s health literacy. Furthermore, psychiatric morbidity can impact upon a range of enabling factors such as quality of social relationships. A literature review aiming to assess the use and implementation of Andersen’s model found substantial variations in the variables used, and discrepancies in the way some studies classified variables as either predisposing or enabling (Babitsch et al., 2012). The model has also been critiqued for treating utilisation as a binary outcome and failing to address those who do not seek, or are refused, care. Attendance of an initial appointment tells us nothing about ongoing engagement with services where the intervention demands it.

*Dixon-Woods ‘Candidacy’ construct*

Dixon-Woods (2006) argues for a more dynamic framework that can capture the complex and iterative processes involved in accessing, and navigating use of, care (Dixon-Woods et al., 2006). Dixon-Wood argues the common approach of measuring equitable access to health services by consumption of units of healthcare (e.g. number of consultations), is an unhelpful practice because it is based upon untested normative assumptions about the ‘correct’ level of utilisation and hard-to-measure levels of need. Furthermore, she argues that there is an implicit assumption that health service use i) constitutes the most rational response to need, ii) is desirable, and iii) non-utilisation is a direct reflection of non-offer of care. Instead Dixon-Woods argues that receiving healthcare results from many different
complex processes which are “highly dynamic, multi-dimensional and contingent” in character (Dixon-Woods et al., 2006).

Dixon-Woods devised the synthetic construct of ‘Candidacy’ through her review of the literature regarding health service use by socially-economically disadvantaged groups. She defines the construct as “the ways in which people’s eligibility for medical attention and intervention is jointly negotiated between individuals and health services” (Dixon-Woods et al., 2006). She outlines the following seven overlapping stages that patients are required to navigate on their treatment pathway. First, ‘identification of candidacy’ refers to how people recognise they have symptoms which need medical attention and how they go about asserting a claim for care. Second, ‘navigation’ refers to people’s awareness of services and the practical resources, (e.g. transport, flexible working patterns), which, if not mobilised, can create barriers to service use. Third, ‘the permeability of services’ refers to how easily people feel able to use services. Fourth, ‘appearance at health services’ refers to the need to make a claim for medical attention or intervention. This involves the ability to credibly articulate and formulate the health problem. Fifth, ‘adjudications’ refers to decision-making by healthcare professionals involving judgements which serve to enable, or restrict, the progression onwards with treatment. Sixth, ‘offers and resistance’ captures the possibility that people may resist offers of care. Finally, ‘operating conditions and the local production of candidacy’, refers to the wider organisational context and the perceived or actual availability of resources.

The candidacy framework has been successfully applied to increase understanding of the healthcare experiences of a range of disadvantaged groups including people with disabilities (Chinn & Abraham, 2016), asylum seekers and refugee populations (van der Boor & White, 2020), and older ethnic minority adults (Koehn, 2009). These researchers comment upon the high level of sensitivity that
the framework offers when seeking to understand issues related to service use, and its ability to break a complex process down into conceptual units which can be translated into recommendations.

To sum up, service use has been conceptualised in a range of ways. Andersen’s behavioural model has influenced the design of much empirical research into mental health service use. However, it is limited by its treatment of service use as a binary outcome, as this fails to account for the full range of engagement experiences that can occur. In contrast, the more recently devised ‘Candidacy’ construct, highlights how service use should be measured in more dynamic way between service users and health care providers. With reference to these models, the next section will provide an overview of the explanations proposed for men’s differential mental health needs and service use.

**Explanations for differences in men’s mental health and mental health service use**

*Masculinity norms*

In contrast to Andersen’s model, which treats gender as a ‘biological imperative’ which influences the likelihood that people will need health services in an indirect way, the dominant explanation for men’s distinctive mental health needs centres around the influence of the gender socialisation processes in Western cultures, which create restrictive norms for how men should think, feel and behave. Traditional masculine attributes such as stoicism, self-reliance and restrictive emotionality have been linked to the lower rates of depression found and the apparent reticence of men to seek help (Seidler et al., 2016). Conformity with masculine attributes makes identifying with a sense of sadness or low self-worth more difficult and can feel incompatible with the expression of emotional

Where the masculinity hypothesis does align with Andersen’s model is the emphasis it places on need as an important and proximal factor required for use to occur, however rather than treating gender and need as separate categorical entities, proponents see the two as inextricably linked in the influence they exert on service use. For example, in explaining the paradox of low depression and high suicide rates in men, some researchers have suggested the existence of a ‘masked depression’ in men. It is proposed that an underlying depression is driving symptoms consistent with other diagnostic categories, and more aligned to socially acceptable masculinised forms of male emotion, such as aggressiveness and anger (Cochrane & Rabinowitz, 2000). Although there is no direct evidence of this phenomenon, the higher rates of externalising disorders, such as substance use disorder, antisocial personality disorder and anger management problems, found in men compared to women, are arguably consistent with this explanation (Addis & Mahalik, 2003). An alternative position is that rather than experiencing a ‘masked depression’, some men may experience a ‘masculine depression’, a phenotypic variant of prototypic depression that reflects masculine gender norms which promote action rather than introspection in men (Addis & Mahalik, 2003). Measurement tools such as The Masculine Depression Scale (Magovcevic & Addis, 2008) have been developed to account for male-specific externalised symptoms of depression.

Regarding men’s underuse of mental health services, a recent systematic review of the relationship between masculinity and help-seeking for depression, found that conformity with traditional masculine norms impacted upon men with depression in a threefold way. These were: 1) the type of symptoms that manifest for men and how these are expressed, e.g. limited emotional vocabulary maladaptive to the therapeutic context and depression expressed via irritability and
substance misuse; 2) men’s help-seeking attitudes, intentions and behaviours, e.g. therapy seen as effeminate, reducing the likelihood of help-seeking and leading to greater minimisation of distress within therapeutic sessions; 3) men’s coping styles and treatment preferences, e.g. higher reliance on maladaptive coping strategies such as social withdrawal (Seidler et al., 2016). It was noted that most of the reviewed studies relied upon convenience sampling of men who were healthy, White, undergraduate students or community participants with self-reported symptoms. The authors argue, therefore, that the experiences of men who are receiving clinical interventions and who do not fall into these social groups is less explored. Future research which explores within group differences is recommended.

A number of other critiques have been levelled at the reductionist emphasis in the men’s mental health field on the allegedly pathological role of masculinity (Elder & Griffith, 2016; Whitley, 2018). Whilst there is consensus that traditional notions of masculinity can be detrimental to help-seeking and coping with distress, concern has been raised that this explanation been over-emphasised and presented as an individual-level attitudinal factor, meaning that focus on the impact of social context and other social determinants of health has been relatively minimal. Furthermore, by conceptualising masculinity in this way, an implicit message is sent about who is to blame. For example, a recent public health campaign ran by the US Agency for Healthcare Research and Quality centred around the slogan ‘this year thousands of men will die from stubbornness’ (Whitley, 2018).

Mental health stigma and discrimination

There is widespread stigma attached to mental illness which operates as a barrier to mental health service use (Clement et al., 2015). Disentangling the impact of stigma and masculinity norms on men’s help-seeking is tricky, with the literature often treating these as inextricably linked/overlapping explanations.
Three forms of stigma that can be usefully differentiated are public stigma, self-stigma and structural stigma (Corrigan, 2004). Public stigma describes negative societal prejudice about mental health and mental health service use which can manifest in a range of subtle, to overt, public responses. Self-stigma refers to negatively held personal beliefs relating to one's mental health and what it means to seeking help. Self-stigma is dependent upon the existence of negative societal beliefs (public stigma) and the internalisation of stigma-related discrimination, which is then activated if the individual develops a mental illness. Structural stigma refers to more macro level processes which create treatment barriers, for example relatively long wait times for mental health treatment compared to physical health treatment due to disproportion allocation of resources.

Research has suggested that men are more likely than women to suffer from some forms of stigma associated with using mental health service. For example, Wu et al (2017) sought to identify profiles of public and self-stigma from a national online study of mental health help-seeking attitudes and behaviour among a random sample of college students across the United States. Men were more likely than women to belong to the ‘High self, high public stigma’ group which strongly endorsed public and self-stigma toward professional help-seeking, and were least likely to use mental health services (Wu et al., 2017).

Returning to the relationship between stigma and masculinity norms in relation to men’s help-seeking, one study found that self-stigma was one of the primary mediating factors in the relationship between conformity to masculine norms and help-seeking (Hammer et al., 2013). The authors argue that there are clinical implications that can be derived by such elucidation of the relationship, such as redirecting intervention aims toward normalising of mental health issues, and away from a sole focus on decreasing conformity to traditional masculine norms. Conceptually there may also be some value in emphasising the role of stigma for
men’s reticence to use mental health services; recognition that the pressures masculine norms exert are representative of a wider pervasive stigmatising social context may neutralise the tendency to blame individual men for oversubscribing to a traditional masculine identity. This explanation more naturally aligns with the Candidacy construct. Whilst adherence to traditional masculine norms is often presented as an intra-subjective process, consideration of the impact of stigma encourages relationships between individuals with healthcare professionals and organisations to be brought into focus.

It is important to note that the detrimental impact of mental illness stigma upon service use is compounded by social identities and conditions other than gender. For example mental health stigma can be higher in some ethnic minority and religious communities (Eylem et al., 2020; Peteet, 2019). The concept of ‘Double Stigma’ (Gary, 2005) aims to captures how in the context of mental health service use, minority groups suffer a double burden; in addition to mental health stigma, they are theorised as having to contend with societal prejudice and discrimination relating to their group affiliation. The possibility for within group tendencies to associate shame with seeking mental health services is also highlighted. It follows that men from minority cultural groups may have a different, and possibly more challenging, experience to men from majority cultural groups regarding mental health service use.

In summary, the pressure to conform with traditional masculine norms has become a dominant explanation for men’s reluctance to use mental health services. However, the use of socially diverse samples of men using clinical services are less common in this body of literature (Seidler et al., 2016). Furthermore, it has been argued that role of masculinity has been overemphasised and presented as an individual-level factor, meaning consideration of other social identity and contextual factors has been relatively neglected (Bilsker & White, 2011; Elder & Griffith, 2016;
Whitley, 2018). Research has also explored the role of stigma in men’s patterns of service use. This conceptually situates men’s reluctance to use services within a wider social context. Related research highlights the possibility that stigma associated with service use may be worse for individuals with minority group membership. The next section will explore the impact of other facets of social identity on mental health service use with reference to the social determinants’ literature. The aim is to outline sociodemographic and socioeconomic characteristics, other than gender, which are known to impact service use, and therefore provide clues as to which social characteristics may contribute to within group differences of service use for men.

**Social determinants of mental health**

A substantial body of literature exists on the social determinants of mental health. This work seeks to uncover pertinent social factors contributing to elevated levels of morbidity and mortality, which exert effects over what can be accounted for by biological or genetic explanations. Because these determinants reflect social disadvantage and are believed to be largely avoidable they are considered unjust and rectifying the imbalances they represent is deemed a matter of social justice (Braveman et al., 2011).

However less work has been carried out to uncover the social determinants of mental health *service use*. Inequity occurs when access to healthcare is systematically determined by factors other than underlying need. Studies in this field typically follow an approach coined ‘the population-standard approach’ (Asada & Kephart, 2011). This is approach uses statistical models to distinguish between “need” (e.g. psychiatric morbidity), and “non-need” (e.g. socio-economic and sociodemographic indicators), determinants and then explore whether mental health service use is associated with non-need indicators after adjusting for need indicators. As such, much of the social determinant’s research into mental health
service use (deliberately or inadvertently), draws from Anderson’s behavioural model by incorporating need and social characteristics into statistical models. Furthermore, service use is commonly measured at a single time point and often relates to the consumption or not of a healthcare unit. Less common is measurement at the contextual level and studies do not typically differentiate between predisposing and enabling factors.

**Need-related determinants of mental health service use**

Need for mental health services has been conceptualised as being made up of evaluated or perceived need (Andersen, 1995). Evaluated need is operationalised through use of standardised measurement tools which provide objective ratings of symptomatology or indicate the presence of a disorder according to predefined diagnostic criteria. Perceived need is typically operationalised through measures of self-rated health which provide subjective ratings of mental distress and impairment.

Symptom severity has consistently found to be the most important determinant of service utilisation (Alonso et al., 2007; P. Bebbington et al., 2003; P. E. Bebbington et al., 2000; Codony et al., 2009; Weich et al., 2007). The positive association between disorder severity and treatment use has been found to exist cross culturally (Kessler & Consortium, 2004), and when considering increasing numbers of comorbid mental disorders (Van Beljouw et al., 2010). However caution has been urged in using the presence of mental disorder alone as a proxy for treatment need (Sareen et al., 2013). There are people who do not meet diagnostic thresholds who seek care for legitimate reasons (e.g. sub threshold presence of distress symptoms and/or help coping with life stressors), and conversely, there are those who do met diagnostic criteria who do not seek care (e.g. having needs met from other sources, normal responses to stressors such as bereavement being misclassified as disorder). Furthermore, distress associated with mental disorder can be transient and therefore resolved without treatment (Sareen et al., 2013).
Perceived need is a useful additional measure as it can account for some of the blind spots associated with evaluated need. As would be expected, perceived need is also a strong indicator of service use; people are more likely to seek treatment when they perceive they need it. Although perceived and evaluated need are typically strongly correlated, this is not always the case (Sareen et al., 2013), and lack of problem recognition has been found to be a predictor in delayed help-seeking (Thompson et al., 2008).

**Non-need determinants of mental health service use**

**Socio-demographic characteristics**

Research findings using the ‘population-standard approach’ to explore inequity in mental health service use suggest that sociodemographic disparities exist by gender, age and ethnicity. As much as possible the studies referred to below are drawn from countries with universal or near-universal healthcare, and therefore can be deemed more representative of the UK context.

Women’s relative high use of mental health services compared to men has already been outlined, and so will not be expanded upon here other than to confirm this gender pattern is also reflected consistently in the social determinants literature (Bebbington et al., 2000; Cooper et al., 2013).

Regarding age, mental health service use tends to be most likely in middle adulthood, with studies reporting that younger and older adults use services less (Alonso et al., 2007; Bebbington et al., 2000; Cooper et al., 2013). This pattern has also been found in relation antidepressant usage (Bebbington et al., 2003; Weich et al., 2007). There is also evidence which suggests older people are more likely to delay treatment seeking (Thompson et al., 2008), or visit their GP for mental health reasons (Cooper et al., 2010).
The relationship between ethnicity and mental health service use is complex. Whilst most studies suggest ethnicity minority status is associated with lower service use, there are inconsistencies in which groups are most affected, and inadequate size and diversity of samples can preclude the ability to differentiate meaningful ethnic groups. Analysis of the UK Adult Psychiatric Morbidity Survey found that ‘non-White’ ethnic groups were less likely to be taking anti-depressants and to have seen their GP about their mental health in the past year (Cooper et al., 2010). Where the ‘non-White’ ethnic group was later disaggregated, Black and South Asian groups were found to be less likely than White respondents to have seen their GP about their mental health in the past year (Cooper et al., 2013). Asian and Black groups were also found to be less likely to have received talking therapy than the White British group in a national survey of users of community mental health services in England (Raleigh et al., 2007). The same study found that those of ‘Other’ ethnicities were more likely to have seen a psychiatrist than those from the White British group but to have waited longer to have seen their care-coordinator, suggesting that ethnic minorities may suffer inequitable access for specific treatments. In contrast, earlier studies drawing data from an English national survey of psychiatric morbidity in 1993 found that only those of South Asian origin contacted physicians for mental health problem less, with no difference otherwise found by ethnicity (Bebbington et al., 2000), and no significant differences by ethnicity were found for being in receipt of counselling or psychotherapy (P. Bebbington et al., 2003). Away from service use for treatment of CMD, Black minority groups in the UK have been found to be more likely than those coming from White British groups to experience negative pathways into care for psychosis, including compulsory admissions and/or through the criminal justice system (Morgan et al., 2005). Suggested explanations for this centre around features of the social context including a lack of social support to facilitate service use, previous
experience of discrimination in healthcare and stigmatised views on mental illness held within communities (Morgan et al., 2005).

Other potentially influential socio-demographic characteristics for mental health service use include sexual orientation and religious affiliation which have rarely been considered. These social categories are of interest, as they do not simply reflect individual characteristics, but also encapsulate historical and continuing relations of social inequality and stigma which could conceivably influence engagement with mental health services. None of the referenced studies above include either as a measure, despite occasions where there has been scope to do so (e.g. sexual orientation in the Adult Psychiatric Survey, (Cooper et al., 2010, 2013). This may reflect concern that low case numbers would be insufficient to detect effects.

Most research using the population-standard approach which incorporates sexuality has been conducted in the U.S. and has focused on estimating rates of psychiatric morbidity. This literature consistently demonstrates that sexual minority status is associated with an excess burden of poor mental health (Booker et al., 2017; Cochran et al., 2003; Cochran & Mays, 2000; Sandfort et al., 2001), however exploration of rates of mental health service use is rare. Two American studies, which did investigate the relationship, both found significantly higher use of services by non-heterosexual groups compared to heterosexual groups, after controlling for presence of disorder and possession of health insurance (Cochran et al., 2003; Grella et al., 2009). Discrimination, social exclusion and marginalisation have been often cited as the reason behind both the elevated rates of morbidity and higher rates of service use (Herek & McLemore, 2013). Additionally differential norms within non-heterosexual groups which promote help-seeking have been described (Grella et al., 2009).
Similar to sexual orientation, where research has included religious affiliation, it has typically been conducted in the U.S and has tended to find a positive relationship between mental wellbeing and religiosity (AbdAleati et al., 2016; Harris et al., 2006). Much less is known about how religious affiliation influences mental health care use. One U.S. based study found a positive relationship between religious service participation and outpatient mental health care use among adults with mental health problems (Harris et al., 2006). The strength of this association was stronger among those classed as having serious mental distress compared to those with moderate distress. Research also suggests that pathways into care may be different for religious groups. A U.S. based study using a nationally representative dataset found that approximately a quarter of people who screened positive for mental health disorders initially turned to clergy (including ministers, priests, or rabbis), for help with mental health problems (Wang et al., 2003). The study recommendations included training for clergy in pastoral counselling and improved collaboration with relevant mental health services to facilitate timely referrals where needed.

*Socio-economic status*

There have been conflicting and inconsistent results regarding the relationship between socio-economic status (SES) and mental health service use. SES is a complex construct with no universal definition and has been operationalised through a range of indicators including social class, occupational status, employment, income, wealth, education (Amaddeo & Jones, 2007). Some studies have found no differences in rates of mental health service use by education, income or employment (Codony et al., 2009; Van Beljouw et al., 2010). Others have indicated that lower SES is associated with a higher likelihood of service use. For example, analysis of a series of cross-sectional surveys in the Netherlands from 1979 to 1995 found that households with low income and higher welfare dependence were more
likely to use mental health services (Ten Have et al., 2005). In the UK context, one study found that being unemployed was associated with increased likelihood of GP consultation for a mental health problem (Bebbington et al., 2000). Similarly, greater ‘financial strain’ was associated with more treatment for depression in another study (Weich et al., 2007). These results could be partially explained by socio-economically advantaged groups having the resources to pay for private care. A study which explored differences in SES in use of psychotherapy in the UK between 1991 and 2009 found that low education, household income and occupational status were associated with greater odds of having publicly funded psychotherapy (Jokela et al., 2013). In contrast, the same study found privately provided psychotherapy was most common amongst those with higher SES.

Studies have started to move beyond individual level factors to consider neighbourhood characteristics. Neighbourhoods are theorised to exert influence on mental health service use via different pathways. For example, concentration of social deprivation can lead to lack of resources to maintain important organisations such as schools, voluntary organisations or churches, reducing avenues for social support. Alternatively, poor geographical accessibility and transport links to facilities could hinder access. A multi-level Canadian study found that living in a deprived socio-economic neighbourhood was associated with decreased odds of service use even after adjusting for individual characteristics (Ngamini Ngui et al., 2012).

**Summary of determinants of mental health service use**

Overall, the most important determinant of service use appears to be need, which may be best captured through measurement of both perceived and evaluated components. However, in addition to need, a whole range of socio-demographic and SES factors show association with mental health service use, exposing systematic inequities in mental health service use. There has been little exploration within the social determinant’s literature of the possible influence of religion affiliation and
sexual orientation on mental health service use. The commonly used ‘population-standard approach’ tests the effects of need and non-need factors simultaneously, and those effects that are statistically significant become the focus of interpretation. The limitation of this approach is it does not adequately consider the interaction of the multiple social positions inevitably occupied by individuals and how this can exert influence is a way that is distinct from the sum of those positions considered independently. The next section introduces the concept of intersectionality, which provides a framework for considering the simultaneous influence of these social factors. This is relevant to the topic of men’s mental health service use, given the potential it has to usefully shape empirical work which seeks to address identified gaps in the literature around within group differences.

**Intersectionality**

*Theoretical development*

The framework of intersectionality seeks to draw attention to mutually constitutive relations among social identities. The concept is rooted in Black feminism and Critical Race Theory, and was introduced by Kimberle Crenshaw in work which sought to address the marginalisation of Black women within antidiscrimination law and mainstream anti-racist, and feminist, discourses (Crenshaw, 1989). Crenshaw argued that analysis which treats race and gender as mutually exclusive categories renders the experience of Black women invisible. She argued that understanding the experience of women of colour could not come from previous studies of gender combined with those of race, not least because the former was based upon White experience and the latter, on Black men’s experience, but also because the experience of Black women’s subordination, in and of itself, is particular and unique.

Over the years, the concept of intersectionality has been extended to different domains, to engage with a range of issues, social identities, and power
structures. As a research paradigm it is multidisciplinary and has been adopted with the health inequalities literature and more recently psychological research. Regardless of interdisciplinary location, intersectionality is essentially concerned with rethinking the way categories are used to define and understand experience, particularly in relation to power and inequality. Throughout the literature there is a general consensus that, whilst intersectionality is conceptually robust and has the potential to enrich research findings by bringing greater validity and introducing more nuance, there is less consensus and confidence in how this is best applied methodologically (Bauer, 2014).

For clarity McCall (2005) charts the development of three common approaches to dealing methodologically with the complexity of the intersectionality construct. She defines these approaches principally in relation to their stance towards categories. At one end of the continuum, is the ‘anticategorical complexity’ approach. Proponents reject categories and work to deconstruct them entirely arguing that social life is irreducibly complex and cannot be meaningfully categorised. They argue that the normative assumptions of categories such as race, gender, class and sexuality help to sustain inequalities and hope, therefore, that deconstruction would lead to change in oppressive social practices. Ethnographic research lends itself to this approach due to its emphasis on thick description and focus upon the complexity of a single individual’s life.

Mid-continuum is the ‘intracategorical complexity’ stance, rather than work to eliminate categories, proponents of this approach seek to critically understand them. For example, extrapolations may be made about a person’s social position based upon a personal narrative of their life. This can shine a light on otherwise neglected or ‘invisible’ points of intersection, for example, the experience of a bisexual middle-class African-American woman. The intersection here is at single points across categories (in this case sexuality, class, ethnicity and gender), but only represent
one dimension *within* each category (i.e. class as a category is typically made up of 3 dimensions; lower, middle and upper class). This approach therefore provides an opportunity to reveal the complexities of lived experience and social relations for people at specific intersections.

At the other end of the continuum is the ‘intercategorical complexity’ approach. The premise is that however fluid and imperfect social categories are, relationships of inequality exist among social groups which warrant investigation. The intercategorical approach focuses on the systematic comparison of *multiple* groups and can account for all the dimensions set within each category. Complexity therefore arises with the addition of each analytical category to the analysis as this quickly expands the number of groups, and with it, can risk taking results beyond a point of comprehension. Therefore, researchers are required early on to make trade-offs relating to scale, coherence, and difference. Because the full range of dimensions are included, advantage and disadvantage of different positions within categories can be compared.

*Translating intersectional theory into quantitative research*

Intersectionality has more commonly been translated into qualitative approaches (Bauer, 2014) with some arguing it is more compatible with qualitative methodology (Bowleg, 2008; Semlyen et al., 2018). One of the more apparent challenges for quantitative intersectional research is securing a large and diverse enough sample to have enough power to detect effects for minority groups. However there have been increased calls for incorporation of quantitative intersectional approaches within psychological research and accompanying guidance of how to go about doing this (Cole, 2009; Else-Quest & Hyde, 2015, 2016; Warner, 2008). There is a consensus that this does not require the adoption of a new set of data analysis techniques, rather it entails taking steps which cumulatively encourage a reconceptualization of the meaning and consequence of social categories. As such
the literature identifies central issues which inevitably arise and offers suggestions of ways to navigate these (Cole, 2009; Else-Quest & Hyde, 2015, 2016; Warner, 2008). Some examples of the key considerations when approaching quantitative research from an intersectional stance are outlined below.

Firstly, given that individuals belong to so many multidimensional social groups, truly considering all their identity components would “generate an infinite regress that dissolves groups into individuals” (Young 2004, p. 721). Inevitably there is a need to limit the number of potentially relevant identities included in analysis. Warner argues that attention must be paid, therefore, to the decision-making process regarding which identities to include (Warner, 2008). She proposes that research papers explicitly state why certain categories have been prioritised over others for study.

Secondly, and perhaps reflective of its roots in Black feminism, intersectionality has most attended to the experiences of multiple disadvantaged status groups, such as Black women. Caution against such continued ‘content specialisation’ has been advised; whilst it has been vital to redirect attention to groups previously ‘invisible’ within research, it is important that this is complimented by the potential to understand power and privilege (Else-Quest & Hyde, 2015). Furthermore, members of some disadvantaged groups also hold privileged positions i.e. ethnic minority men. By applying an intersectional lens to men’s experiences the ways in which they occupy both positions of power as well as disadvantage can be better understood.

Thirdly, samples should be as representative of the population as possible, and there should be acknowledgement of the inevitable particularity of the every sample (Cole, 2009). Certain groups have tended to be systematically underrepresented in psychological/health inequalities literature. Furthermore, findings from sub groups such as students who are disproportionately White, middle
class, young, have been treated as representative of the whole category (Cole, 2009). By always questioning, ‘who is included in this category?’, the systemic omissions of certain groups in research samples becomes more obvious.

Fourth, the process of quantitative analysis inevitably requires abstraction of social categories from their context. This process of decontextualization should be acknowledged, and implications of the findings need to contextualised with socio-historical and structural inequality in mind (Else-Quest & Hyde, 2016). Reflection on the question ‘what role does inequality play?’ demands consideration of individuals embedded within a social context, and the ways in which these categories have been constructed through ongoing socio-historical processes (Cole, 2009).

Fifth, whilst there is no prescribed ‘intersectional quantitative method’, most scholars argue against the use of additive methods which identify stigmatised social groups i.e. being Black / being a woman / being a lesbian, and then add these categories together in analysis. This is argued to be the conceptual antithesis to the intersectional approach, as it treats each group membership as if it is independent and unidimensional. Instead intersectionality is about recognising the experience of occupying combination of social identities simultaneously, or, in reference to the current example, the experience of being a Black lesbian woman as the ‘meaningful whole’ (Bowleg, 2008). Methods must account for the interdependent and mutually constitutive character of social groups.

Finally, social identities change over time and by context, therefore temporality and fluidity should ideally be accounted for as much as possible (Else-Quest & Hyde, 2015).

Application of the intersectionality framework

To date, much of the research which focuses upon intersectionality focuses on charting its conceptual development, providing recommendations and guidance for
its methodological application, or drawing out what the concept means for ontological theorising around identity. In comparison, research which has applied intersectionality to more grounded questions with implications for health care is limited, especially outside of the U.S.

Little empirical work exists in which intersectionality has been applied to field of mental health service use. The exception is the service use of women, often of minority status, who are experiencing intimate partner violence (IPV) (Anyikwa, 2015; Coston, 2020; Cramer & Plummer, 2009; Lippy et al., 2020; Van Niekerk & Boonzaier, 2019). This is unsurprising given its roots in Black feminist theory and relates back to the trend, referred to earlier, of ‘content specialisation’.

Application to mental health service use

The remaining part of this section describes studies which seek to explore mental health service use and explicitly refer to the intersectionality framework as influencing their study design, hypothesis generation and research aims. Given the limited literature on this, both qualitative and quantitative studies, and those including both genders are discussed. The findings from all these studies highlight the relevance of applying the intersectionality framework to the topic of men’s mental health service use. As will be described, the qualitative studies explore service use as a dynamic ongoing process, more akin to how it is conceptualised within the Candidacy construct. That intersectional influence is uncovered within ongoing service use rather than just at the point of help-seeking further justifies the need for future research, including quantitative studies, to use more refined service use measures.

Qualitative studies

Two qualitative studies were found which both adopt a study design consistent with the ‘intracategorical complexity’ stance. Both focus on exploring the lived
experiences of participants who occupy multiple socially marginalised identities and consider how intersectional identities can leave individuals vulnerable to health inequalities (Moore et al., 2020; Semlyen et al., 2018).

Semlyen et al (2018) sought to explore the intersection of religion, ethnicity, gender and sexual identities in relation to the health service use of six Muslim gay men living in London using interpretative phenomenological approach (IPA). Although not explicitly stated, a broad definition of ‘health service use' was adopted, with transcript extracts referring to interactions with a range of health care professionals including GP’s, therapists, and psychiatrists. Two main themes were identified. First, “the closed community and self-management with healthcare professionals”, referred to how the Muslim community was perceived as a tight network with a tendency to view homosexuality as problematic. Participants described a process whereby they would assess the clinician’s religious identity and professionalism, before deciding how present themselves. One participant described how he would try to ‘act straighter’ if the clinician appeared to be from the same cultural or religious background, for fear of being negatively judged, receiving a poorer standard of care or, being subject to a breach of confidentiality to family and wider community. The second theme, “The authentic identity: ‘you’re either a Muslim or you’re gay, you can’t be both”, referred to how participants assumed that being gay and being Muslim would be treated as mutually exclusive identities within interactions with healthcare professionals. The consequence for some was the need to constantly assert their intersectional identities to persuade others of their legitimacy. Semlyen et al (2018) argue their work demonstrates the complexity of navigating healthcare interactions for these men, in terms of the intrasubjective process of identity management they go through, and how this is reinforced by intersubjective experiences in which homophobia is experienced. The detrimental
impact of such identity concealment on the provision of sensitive and individualised care, and the potential for delayed help-seeking, is highlighted.

An explicit aim of the study was to investigate multiple intersecting identities including gender. However, no reference was made to, if, or how, being a man, or, feeling the pressure to conform to masculinity norms, played out at this intersection. The topic guide was made up of open questions which explored issues of gay or Muslim identity, likewise the focus of the study’s discussion of the health inequalities literature centres around these two aspects of social identity. Even when using IPA, an idiographic method which seeks to uncover what is important to the individual, there is scope for the researcher to influence which identity components are prioritised in conversation through the questions asked. This echoes something of the challenge raised in relation to how quantitative researchers chose which social identity variables to use. A limitation of this paper is a lack of transparency around the lack of reference to gender; there is no way of knowing whether this reflects a decision to prioritise religion and sexual identities over gender ones, or whether it reflects that being male did not feel as relevant in this context to the men interviewed. Because the broad definition of healthcare adopted, the findings are limited in how much they add to understanding about if, and how, stigma associated with mental health service use contributed to the intersectional experience of help-seeking amongst these men.

Moore et al (2020) sought to understand how Black and Latinx sexual minority youth navigate their identities in the context of using mental health services. In depth interviews were conducted of 31 young adults (aged 18-25) residing in New York who identified as Black or Latinx and as non-heterosexual and endorsed symptoms of any mood or anxiety disorder within the past 2 years. Although not stated at the outset as being one of the minority identities of interest, the sample also encompasses a range of gender identities, which emerge as relevant in the
results. Almost all participants described service use as being at odds with the social norms of their ethnic groups, born out of low recognition of mental health problems, preference for alternate coping strategies and mistrust of services. In contrast, participants spoke about an openness to mental health help-seeking in the LGBTQ community. Intersectional stigma was also relevant. Examples include instances when having a mental illness was conflated with being non-heterosexual within some ethnic communities. Additionally, a lack of acceptance from some healthcare providers was perceived by Black trans females due to prevailing cultural stereotypes about masculinity within the African American community. Participants used a range of strategies to empower themselves against their sense that their identity was incompatible with social norms and the stigma they suffered due to their use of mental health services. Participants describe a process of separating from social norms by integrating alternative positive ones. For example, some sought out contrasting views from outside their ethnic community or from more identity confirming religious organisations. Similar to Semlyen et al (2018), participants also described instances of concealing aspects of their identity within interactions with healthcare professionals to avoid additional stigma, although the risk felt here was having the aetiology of their mental health issues being misattributed to their sexual or gender identity. This identity negotiation process led to greater self-acceptance for some; it was commonly reported that a sense of resilience against stigma was aided by being connected to the LTGBQ community which encouraged being open about mental health issues.

Both studies draw attention to the way in which occupying multiple minority statuses can amplify the challenge of seeking treatment. Both studies highlight the extra layers of intra-subjective reasoning individuals go through to use services which others from less marginalised groups are not exposed to, and which may fall under the radar of healthcare professionals. However, Moore et al (2020) also draws
attention to the way in which there can both positive and negative effects of occupying multiple minority statuses. This is interpreted in line with previous research which suggests having to navigate multiple minority social identities can ultimately facilitate a more integrated or flexible sense of self.

Similar to Semlyen (2018) this study does not report on whether being cisgender male exerts any influence either singularly, or via other intersections, in the process of using mental health services. This is unsurprising as the aim of this study, (also reflected in the topic guide), was to explore the impact of occupying marginalised social locations. However, it may have been of value for the study to remain open to the possibility that gender in all its forms may have elucidated further intersectional complexity, whether that be in the form of amplified stigma or via aspects which also confer privilege. This may be another example the tendency toward 'content specialisation' within intersectional research (Else-Quest & Hyde, 2015).

Finally, both studies illustrate how occupying marginalised social identities could cause vulnerabilities to arise across the treatment pathway. This becomes apparent if the results are considered in light of the Candidacy framework. For example, the low recognition of mental health problems within certain ethnic communities alluded to within Moore’s analysis could be pertinent at the ‘identification of candidacy’ stage. The fear of discrimination and judgement from the healthcare professional or wider community uncovered in Semlyen’s study could be pertinent at the ‘adjudications’ stage (in which professional judgements are made) or at the ‘offers and resistance’ phase (in which people may choose to refuse offers of help).

Quantitative studies
Where the intersectionality framework has been applied to quantitative work exploring inequities of mental health service use it has aligned with the ‘intercategorical complexity’ stance. Like the qualitative findings, intersectional influence is uncovered in all cases. In the first two examples outlined below, conventional statistical methods, (differences in between group means and proportions, as well as regression modelling) are initially applied to the data and then following by more complex statistics (path analysis classification and regression trees (CART) which are demonstrably better equipped to uncover complex intersectional interactions and reveal a more nuanced picture of at-risk groups.

Utilising a U.S. nationally representative dataset of 4,825 men aged between 20-59, Parent et al (2018) conducted an intersectional analysis of mental health help-seeking behaviour, measured by whether the men had talked to, or seen, a mental health professional in the past year about their health. They sought to uncover the relative influence of race/ethnicity, sexual orientation, age, income-poverty ratio, relationship status, depression symptoms, and body mass index (BMI) on help-seeking. Two levels of analysis were performed. First, they explored ‘single intersections’ of gender and the main effect of each variable of interest. Higher levels of help-seeking were reported by i) White men compared to Black and Mexican American men, ii) by non-heterosexual men compared to heterosexual men, iii) by older men, iv) by men with lower income-poverty ratios, v) by those who are not married or living with a partner (M/LWP) and vi) by those reporting higher depression scores. Next they explored the ‘double intersections’ of race/ethnicity and the other variables among the men. They did this by testing invariance of path coefficients, using a model based upon equality across groups and by examining paths that, if equality constraints were relaxed, would improve the model fit. The results revealed intersectional influence across all variables of interest. For example, in the initial analysis a negative correlation was found between income-poverty ratio
and help-seeking among men. By then adding race/ethnicity to the analysis, income/poverty ratio was positively associated with help-seeking among White men, negatively associated with help-seeking among Black men and unrelated to help-seeking among Mexican American men.

These results illustrate how with each additional level of intersection comes greater refinement in understanding of where inequities may lie. The approach taken prioritises gender and ethnicity as of groups of particular interest, however the reasons for ethnicity being chosen as the grouping variable of the male cohort was not explicitly stated. Given there is so little existing intersectional research in this area, a priori study designs such as this are somewhat limited because, by predefining areas of focus, interesting variations amongst the additionally available variables may remain undiscovered. For example, whether intersectional influence occurs by age or income within non-heterosexual men. Arguably data driven methods which allow unsuspected patterns to emerge are more suited in this work which is in its exploratory phase. A study by Cairney et al (2013) provides an example of a data driven method being applied to intersectional exploration of the social determinants of mental health service use. Data was drawn from a Canadian health population survey and participants were those aged over 15 who met criteria for one or more mood or anxiety disorders over the past year (n=1213). Logistic regression analyses were initially used to explore associations between eight variables (age, gender, marital status, parental status, income adequacy, education, rurality, visible minority status) and service use (defined as any mental health related outpatient encounter with a health care professional). Results suggested that being female or never married were associated was increased likelihood of having sought care, and the probability of service use was lowest for youngest and oldest ages. Classification and regression tree (CART) analyses were then performed. This is an unsupervised and exploratory technique which involves identifying rules that
distinguish between groups in the data. The final classification tree included decision rules based upon age, sex, income adequacy and marital status. Those more likely to use services were low-income women aged between 23-46; previously married men aged between 23-46 and all participants aged 46 and over. The authors argue, based upon these results, that linear models are insufficient to identify complex interactions.

The final study used regression modelling to investigate the relationship between perceived racism and other forms of discrimination (gender-, class-, and/or sexuality-based) and access to healthcare, measured by whether participants had ever experienced problems accessing hospital, doctors, disability or mental health services (Bastos et al, 2018). Response options were considered separately, and the mental health services outcome will be focused upon here. Data was drawn from a nationally representative Australian social survey of individuals (n=12,368) aged over 15. Effects were adjusted for gender, sexual identity, age, marital status, education, government support being main source of income, foreign born/difficulty speaking English, as well as indicators of need and health care use. The results showed that perceived racial discrimination predicts problems accessing health care in general as well as mental health services. The authors hypothesised that perceived racism would have a particularly severe effect on access to services amongst low status groups (women, sexual minorities, lower SES), however, they no found significant interactions supporting this. When all forms of discrimination were aggregated, both perceived racial discrimination and all forms of discrimination were significant predictors of difficulty accessing mental health services. The authors conclude therefore that multiple forms of discrimination should be considered when addressing barriers to accessing services. Interestingly, perceived gender discrimination was not significantly associated with difficulty accessing any type of service. This could suggest men’s reticence to access mental health services
is fuelled by an internalised sense of shame which they do not link to the experience of discrimination in their external environment. However, as mentioned earlier, one of the limitations of such linear modelling is that there is no way of teasing out which intersections are important either at the macro level of discrimination nor micro level of individual social statuses. It would be interesting to explore gender discrimination in male and female groups separately to see whether this changed the picture, likewise for the other categories.

All three studies drew data from nationally representative datasets, which, whilst providing the large and diverse samples needed, also introduced restrictions to the range of variables available for use. Of note were limitations relating to the measurement of race/ethnicity. Despite the emphasis on uncovering the impact of perceived racism on service use, there was no available race or ethnicity variable to include in Bastos et al (2018) analysis. The authors acknowledge the effects of perceived racial discrimination could therefore not be disentangled from other effects of belonging to a minority ethnic group per se. Cairney et al (2013) use ‘visible minority status’ to denote whether participants are ‘White’ or ‘non-White’, this renders a whole range of ethnic groups invisible within analysis and yet is not acknowledged by the authors. In comparison the work by Parent et al (2018) accounts for greater ethnic heterogeneity, however the ‘other’ and ‘other Hispanic’ ethnic groups were excluded due to small numbers and ‘Asian’ groups were not represented as this group was added to the survey at a later time. The authors acknowledge that research with these ethnic groups is needed, including those from multiracial groups.

*Summary of intersectional research which explores mental health service use*

Where an intersectional framework has been applied to the topic of mental health service use, time and again there is evidence of intersectional influence. The results from the qualitative studies reviewed here describe how occupying multiple minority
statuses can not only amplify the challenge of seeking treatment but can
detrimentally impact upon the experience of care, particularly in relation to the
possibility for developing trusting and open relationships with health care providers.
This suggests that ideally future research design should investigate service use as
more than just access into services but also explore what happens once treatment
has commenced. None of the quantitative studies reviewed here operationalise
service use in this way, however their findings do provide a more nuanced picture of
subgroups at risk of lower service use than would have been possible had a more
traditional ‘population standard approach’ been adopted. To this extent the case is
made for continuing to explore this topic in different settings from an intersectional
quantitative perspective using more complex data driven statistical methods. Large
ethnically diverse datasets are needed to facilitate the inclusion of ethnicity in a
more refined way.

The empirical paper presented in the next section of this thesis will seek to
address some of the issues identified in this conceptual introduction by exploring
whether variations in psychological treatment service use occurs, by a range of
intersecting social status indicators, at multiple time points using a large socially
diverse dataset of men.
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Part 2: Empirical Paper

Variations in mental health service use by men: an intersectional analysis of routine treatment data
Abstract

Background: Men’s reticence to seek help for mental health problems is well documented. Less is known about patterns of engagement once they have made initial contact with services and whether there is variation in relation to sociodemographic and socioeconomic characteristics. This study will employ an intersectional approach to investigate how multiple sociodemographic and socioeconomic indicators interact to increase and decrease the likelihood of male service users’ engagement with psychological treatment services.

Method: Routinely collected data from 9,904 male service users accessing two psychological treatment services in two diverse London boroughs was analysed for this study. Latent Class Analysis (LCA) was used to identify subgroups of male service users by ethnicity, sexual orientation, religious affiliation and employment status. Multinomial logistic regression was used to explore associations between service use outcomes and both individual social status indicators and the identified classes.

Results: Regression analyses revealed that being Black, Asian, Muslim as well as unemployed conferred a greater risk of not commencing or completing treatment for men in this sample. LCA identified seven subgroups of men differentiated predominately by ethnicity and religious group membership, with sexual orientation and employment status distributions staying broadly similar across classes. The ‘Asian Muslim’ class and the ‘BAME non-religious’ class were at higher risk of disengagement, whilst the ‘Asian other religion’ class were at higher risk of being referred elsewhere rather than completing initiated treatment. Post-hoc interaction analysis revealed that younger men from the ‘BAME Christian’ group were at higher risk of being deemed unsuitable for treatment.
Conclusions: Results reveal significant inequalities in the mental health service use of men by ethnic and religious group and markers of socioeconomic status. Compared with the regression models, LCA revealed further nuance regarding the intersection of gender, religion and ethnicity. However, associations between employment status and service use revealed in regression modelling did not feature in the LCA results, meaning a potentially important source of disadvantage could be overlooked if the LCA had been the sole analytic model used.
Introduction

Men have been found to consistently seek help for mental distress less than women (Addis & Mahalik, 2003; Andrews et al., 2001; Galdas et al., 2005). Equally clear is that this trend cannot be accounted for by lower rates of morbidity; whilst women are more likely to present to services with common mental disorder (CMD), being a man is associated with elevated levels of other psychiatric disorders, for example substance use disorder (McHugh et al., 2018), anti-social personality disorder (Sher et al., 2015), and attention deficit hyperactivity disorder (Arnett et al., 2015). It has been suggested that men may actually experience similar rates of CMD to women but express their distress differently, and crucially, in ways that prevent the identification of diagnostic categories (Addis & Mahalik, 2003). Perhaps the most stark and sobering indicator of unmet mental health need in men is the global phenomenon of higher rates of suicide in men compared to women, estimated to be between 3.0 to 7.5 higher (Bilsker & White, 2011).

Less is known about patterns of engagement of men with mental health services once contact has been initiated. Most quantitative research which investigates inequity in mental health service use is limited by its reliance upon measuring consumption of units of healthcare (for example attendance or not of an initial consultation appointment) at a single time point (Dixon-Woods et al., 2006). As such, little is known about the trajectories of men once they have sought help. For example, what the rates of retention are and the extent to which, for those not completing treatment, this represents an individual choice to discontinue or a clinician determined decision based upon perceived suitability for the service. Qualitative work suggests a tendency for men to i) seek help only after exhausting all other perceived avenues for support and ii) struggle to fully engage in the therapeutic process (Johnson et al., 2012). For a group reticent to help seek, it is crucial that once contact has been initiated, services are as inclusive of men as
possible to avoid unnecessarily non completion of treatment. Better understanding of patterns of engagement is a useful starting point in this process. Negative experiences may result in a reluctance to re-engage at later points and poor engagement with psychological interventions has been found to be negatively associated with clinical outcomes (Clark et al., 2018; Dahlsgaard et al., 1998) thereby perpetuating the problem of unmet need in men.

A dominant explanation for differential patterns of service use in men has been that expressing, and seeking help for, mental distress is felt to be antithetical to conforming to traditional masculine ideals, such as stoicism, control and independence (Addis & Mahalik, 2003; Möller-Leimkühler, 2003; Seidler et al., 2016). This explanation is compelling; it provides a succinct and intuitive explanation for a psychosocial phenomenon which has been replicated across several studies. However these findings have often been based upon studies conducted on samples of healthy, White, male students or community members with self-reported symptoms. (Seidler et al., 2016). And findings have been misconstrued by some to ‘blame’ the individual attitudes of men rather than recognising masculinity as socially constructed (Whitley, 2018). The impact respectively is that within group differences of men who are accessing clinical services are not well understood and the influence of wider societal context and power structures are less acknowledged.

The intersectionality research paradigm has potential to complement, and expand upon, current understanding of men’s mental health service use. Originally conceived by Black feminists and developed within Critical Race Theory, intersectionality refers to the multiple and mutually constitutive social positions occupied by people and seeks to uncover the corresponding levels of power or disadvantage conferred to the individual (Crenshaw, 1991). Prominent scholars argue that it demands analytical exploration of whether occupation of particular combinations of social positions exerts influence in a way that is distinct from the
Bowleg argued that rather than investigating the effects of being Black/lacking as independent categories and then adding these together, the experience of being a Black lesbian woman should be recognised as a meaningful position in and of itself, and one which brings with it, unique experiences. Although rarely done, applying intersectionality to the context of male mental health service use has potential to uncover which groups of men are most likely to struggle with engagement and thereby add greater nuance and a different level of explanation to current understanding.

The existing social determinants of mental health service use literature has not typically been informed by intersectional principles but rather explores the effect of ‘non-need’ factors (e.g. sociodemographic and socioeconomic indicators) on service use whilst controlling for ‘need’ (e.g. ratings of subjective or objective psychiatric morbidity). It does however provide clues as to social identities which may intersect in relevant ways for male service users and therefore warrant inclusion in intersectional research. Being from a minority ethnic group or being young or older in age tend to be associated with reduced levels of service use (Alonso et al., 2007; Bebbington et al., 2000; Cooper et al., 2010, 2013; Raleigh et al., 2007). Socioeconomic status has tended to either show no significant association with service use (Codony et al., 2009; Van Beljouw et al., 2010) or has indicated an increased likelihood of service use (Bebbington et al., 2000; Ten Have et al., 2005; Weich et al., 2007).

Other sociodemographic characteristics such as religious affiliation and sexual orientation have rarely been investigated in relation to mental health service use. Given the historic and prevailing levels of stigma and discrimination associated with certain religious groups or being non-heterosexual, it is plausible that these group memberships could impact on engagement levels with public services. The
few studies which do exist tend to be from the U.S and find that being non-
heterosexual and being religious are associated with increased likelihood of using
services (AbdAleati et al., 2016; Cochran et al., 2003; Grella et al., 2009; Harris et
al., 2006).

Although infrequent, there are a few recent studies which have sought to
investigate men’s mental health service use from an intersectional perspective
(Parent et al., 2018; Semlyen et al., 2018). For example, Parent et al (2018)
analysed data from a large representative sample of men residing in the U.S. and
found being older, being non-heterosexual, being White (compared to being Black or
Mexican American) and being not married or living with a partner were associated
with higher levels of mental health help-seeking. Path coefficients from each of the
social status predictor variables to help-seeking were then examined across the
three racial/ethnic groups. The findings revealed further intersectional nuance in the
data. For example, income/poverty ratio which had previously shown no association
with help-seeking was found to be positively associated with help-seeking among
White men, negatively associated with help-seeking among Black men and
unrelated to help-seeking among Mexican American men (Parent et al., 2018).
Intersectional influence was also found in a qualitative study conducted with six
Muslim gay men residing in London (Semlyen et al., 2018). Some of the men
described a process of internalised identity negotiation in the context of interacting
with healthcare providers, leading to a moderated outward expression of certain
aspects of their identity dependent upon their perception of the clinician and their
possible biases. Other men described a need to constantly assert their intersectional
identity of being Muslim and being gay, as a way of pushing back against a felt
expectation for heteronormativity amongst Muslim men.

Intersectionality has more commonly been translated into qualitative
approaches which may reflect a perception of ill fit with quantitative research, both in
terms of underlying ontological and epistemology assumptions and existing methodologies. This is likely the case for intersectional proponents who take a position of either rejecting social categorisation entirely or seek to uncover in detail the complexities of lived experience for people at a specific intersection (McCall, 2005). However, there is scope for quantitative research to contribute to an intersectional approach which, whilst acknowledging the limitations of social categorisation, sees value in systematically comparing social groups to better understand the inequality that exists among them.

A commonly used quantitative method in intersectional research is Latent Class Analysis (LCA) (Garnett et al., 2014; Goodwin et al., 2018). LCA is a clustering approach based upon probability theory which can be used to uncover statistically distinct subgroups with datasets (Finch & Bronk, 2011). Individuals are assigned a subgroup, or 'latent class', dependent upon the pattern of their responses to a set of categorical variables (e.g., questionnaire items or social status characteristics). Latent class membership is then used to explain individual differences in the observed item response patterns. LCA aligns well with the intersectional approach because it allows for the simultaneous consideration of multiple interacting risk-factors and in doing so, has the potential to uncover subgroups of individuals occupying positions of privilege, disadvantage or a mix of both; tasks which can be difficult to achieve using traditional multiple regression modelling. Furthermore, it constitutes a data driven approach with groupings being determined by inter-relationships in the data, in contrast to analyses which are designed to test a priori assumptions and, in doing so, may miss important hidden intersectional identities. In the field of mental health, LCA has successfully been applied to uncovering clinical subgroups for a variety of purposes. For example identifying groups at greater risk of developing CMD based upon individual social status indicators (ethnicity, migrant status and multiple indicators of SES) (Goodwin
et al., 2018) or identifying groups who are more or less likely to benefit from psychological therapy based upon demographic and self-reported symptom data (Saunders, Buckman, et al., 2020). However, to the best of the authors knowledge LCA has not been used to explore whether there are clinical subgroups at higher risk of poor service use based upon sociodemographic and socioeconomic characteristics.

An obvious challenge for quantitative intersectional research is obtaining a dataset which is sufficiently large and diverse as to be able to detect effects within less common groups. For this reason, routinely collected data from large-scale psychological services, such as the Improving Access to Psychological Therapies (IAPT) programme in the UK, provide such an opportunity. Launched in 2008, the IAPT programme aims to increase equitable access to evidence-based psychological treatments for anxiety disorders and depression within the National Health Service (NHS). Key to its inception was the argument that the economic costs of having high levels of untreated mental disorder in the population (e.g. unemployment and benefits costs) outweighed the expenditure required to provide better access to services (Layard, 2004). A key feature of IAPT is the central role of the collection of data for monitoring and evaluation purposes. Information such as demographic details, referral source, assigned treatment are collected for all service users at assessment. In addition, service users are required to complete a range of outcome measures following at every clinical contact, which ensures that post-treatment outcome data are available even if therapy is ended prematurely. The primacy placed on such session-by-session outcome monitoring has led to exceptionally high levels of data completeness, with recent estimates indicating pre-post data is available for 98.5% of service users (Clark, 2018).

Existing studies investigating equity of access to IAPT services have produced mixed results. Di Bona et al (2014) compared sociodemographic and
socioeconomic indicators and clinical characteristics of ‘attenders’ of the two pilot IAPT sites with ‘non-attenders’, people who did take up the referral from their GP. The groups were found to differ on relationship status but none of the other sociodemographic or socioeconomic indicators (age, gender, deprivation level, ethnicity). Clinical differences were observed; those with more frequent suicidal thoughts, lower psychological distress scores, low or high duration of current illness episode were less likely to attend (Di Bona et al., 2014). Other studies have found evidence of sociodemographic and socioeconomic inequities. A group of Southwark IAPT service users were compared with a group of Southwark residents with diagnosable mental health problems (Brown, 2018). IAPT service users tended to be younger, to self-identify as being from a ‘White’ ethnic group and be male compared to the community group (although females were dominant group in both the IAPT and community groups). IAPT service users were also more likely to be unemployed and full-time homemakers and less likely to be in receipt of benefits compared to the community group. These differences were largely found when comparing those IAPT service users who had been referred via their GP, however amongst those who had self-referred into the service, the only variation from the community group was by age and employment status, with a greater proportion of self-referrers aged between 25-44 and being unemployed.

To the best of the authors knowledge only one study has been published exploring the question of whether IAPT service use is equitable once an individual has embarked upon treatment. This study compared the gender, age and ethnicity of service users allocated to low intensity (e.g. guided self-help) or high intensity (e.g. face to face therapy) treatment arms and found no significant difference across the groups (Chan & Adams, 2014). However, several methodological problems limit the study’s value, namely a small sample size (n=100), with an ethnic composition consisting of almost entirely ‘British’ (it is unclear if this refers to White and non-
White British service users) or 'not stated' self-reported ethnicity groups, thereby precluding any meaningful examination of group differences by ethnicity.

The current study will make use of a large IAPT dataset collected from two services located within two diverse boroughs in North East London. It aims to explore whether the mental health service use of men, differentiated by sociodemographic and socioeconomic indicators, varies systematically at multiple points along the treatment pathway. Given that relatively little is known about patterns in men’s mental health service use once clinical contact has been initiated, this study will initially explore associations using a traditional design in which individual indicators are treated independently using regression modelling. Following which, LCA will be conducted to allow for the multiple indicators to be used simultaneously in line with intersectional principles.

The objectives for the study are:

1. To examine the association between ethnicity, religious affiliation, sexual orientation, employment and neighbourhood deprivation level on service use within a sample of male IAPT service users;
2. To identify and describe statistically distinct subgroups (latent classes) of male service users characterised by ethnicity, religious affiliation, sexual orientation and employment;
3. To describe associations between male subgroups and service use.

The lack of work exploring patterns in men’s service use once they have commenced treatment warrants exploratory hypotheses rather than ones which suggest a direction of effect.

The hypotheses for this study are:

- H1: There will be systematic differences in service use by men based upon sociodemographic and socioeconomic characteristics.
• H2: There will be statistically distinct subgroups of male service users referred to IAPT services, based on sociodemographic and socioeconomic characteristics (ethnicity, sexual orientation, religious affiliation and employment status).

• H3: These subgroups will be associated with differential rates of engagement with services.

**Method**

**Study sample**

The dataset used for this study is made up of routinely collected service user data from two IAPT services in North East London. National figures are provided here to give context to study sample characteristics which are later reported in the results. In 2017-2018, 978,477 people attended an initial assessment appointment at one of the UK IAPT services nationally (Moller et al., 2019). Following which, 28,733 (3%) service users were recorded as being deemed ‘unsuitable’ to proceed on to treatment and 395,035 (40%) service users were recorded as disengaging after having had only one appointment. 517,942 (53%) of referrals who were assessed by IAPT completed a course of treatment. Treatment completion is defined within the IAPT programme as having a minimum of 2 sessions.

Male service users were included in the current analyses if they had undergone an assessment and had completed their episode of care (including those not entering treatment) with the services between October 2011 (when services were operational and data collection began) and February 2020 (to exclude data collected during the covid-19 pandemic given the severe disruption this caused to service delivery). Where service users had received multiple episodes of care for example following a relapse, only the first episode of care was included. This was because we had no way of measuring, and therefore controlling for the potential
impact of, positive or negative experiences in earlier episodes of care on current
service use patterns. Service users were excluded if there was no data on their
reason for ending contact with the service following an initial assessment, as this is
the outcome of interest for this study.

The reason for missing outcome data was unclear and so a comparison was
made between the group with missing outcome data to those without missing
outcome data (see Table 1 in appendices). Significant differences were found
between the groups in terms of ethnicity, sexuality, religion, and neighbourhood
depresentation level. For example, the missing data group had higher proportions of
men coming from Asian or Muslim groups. In comparison the sample with no
missing outcome data had higher proportions of White and Christian men or those
living in the most deprived neighbourhoods. A total of 9,904 service users met
inclusion criteria and were included in the analyses. See figure 1 for flow of service
users into this study.

This study was conducted as part of the North and Central East London
IAPT Service Improvement and Research Network (NCEL IAPT SIRN). Permission
was granted by the network for data to be used for the purpose of this research
thesis. The network aims to analyse routinely collected IAPT data for the purpose of
service evaluation, sharing best practice and improving the care for service users
(Saunders, Cape, et al., 2020). No further data on patients other than that already
routinely collected was used for this project and NHS ethical approval was not
required for this study (confirmed by the Health Research Authority July 2020,
reference number 81/81).
Referred to the services
n = 55,214

Exclusions
n = 34,295: Female service users
n = 2,835: Receiving treatment from March 2020 onwards
n = 5,403: Never attended an assessment
n = 2,135: Not the first episode of care
n = 637: No outcome data available
n = 5: ‘Service user deceased’ as reason for ending use of service

Included in analyses
n = 9,904

Figure 1: Cohort used in the analyses
Measures

Social status indicators

The independent variables used in the analyses for this study are routinely collected as service user information by IAPT services, except for neighbourhood deprivation level (National Collaborating Centre for Mental Health, 2019). They include a range of sociodemographic and socioeconomic variables that describe social status and are summarised below in Table 1.

Socio-demographic indicators included self-reported measures of ethnicity, sexual orientation, religious affiliation, and age. For ethnicity, responses to the 17 categories available were collapsed into “White”, “Black”, “Asian”, “Mixed”, “Other” to increase power and optimise the chances of model convergence. For sexual orientation IAPT categories of “heterosexual”, “gay/lesbian”, “bisexual” and “person not sure” were recoded into “heterosexual” and “non-heterosexual”, with “person not sure” being treated as missing data. For religious affiliation, responses to the 12 IAPT categories were collapsed into “no religion”, “Christian”, “Muslim”, “Other” to reflect the two most prevalent religious groups in the UK.

Socioeconomic status included employment status and neighbourhood deprivation level. Employment status and benefit receipt are measured together on IAPT with eight possible categories. These were collapsed into two categories of “employed” and “unemployed”. The employed group comprised of those indicating that they are either “employed”, “students”, “homemakers”, “volunteers not seeking work” or “retired”. The unemployed group comprised of those indicating that there are “unemployed and seeking work”, “unable to work due to sickness or disability” and those “not actively seeking work”. Neighbourhood deprivation was measured using the English Indices of Deprivation 2019 (IoD2019). This measures the relative deprivation of small areas in England. Multiple domains of deprivation (including
income, employment, education, housing) are weighted with varying strengths and compiled into a single score of deprivation. This is calculated for every Lower-layer Super Output Area (LSOA). LSOAs are designed to be of similar population size, with an average of approximately 1,500 residents or 650 households. There are 32,844 LSOAs in England. An IMD score is available for each LSOA as a continuous variable but it is more typically used as a decile (Todd et al., 2014; Walsh et al., 2010). For the purposes of this study decile scores were collapsed into quintiles to increase power.

**Table 1: Sociodemographic and socioeconomic indicator variables used in the study**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>Categorical</td>
<td>‘White’, ‘Black’, ‘Asian’, ‘Mixed’ or ‘Other’ ethnic group</td>
</tr>
<tr>
<td>Religious affiliation</td>
<td>Categorical</td>
<td>‘No religion’, ‘Christian’, ‘Muslim’, ‘Other religion’</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>Dichotomous</td>
<td>‘Heterosexual’ or ‘Non-heterosexual’</td>
</tr>
<tr>
<td>Employment</td>
<td>Dichotomous</td>
<td>‘Employed’ or ‘Unemployed’</td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>Categorical</td>
<td>Quintiles ranging from least to most deprived neighbourhoods.</td>
</tr>
<tr>
<td>deprivation level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Service use outcomes**

Two nominal categorical outcome variables were created using the ‘reason for end of IAPT care pathway’ IAPT codes assigned to the service user. The outcome variables were re-coded in a way that allowed measurement of service use at two points along the treatment pathway; following the initial assessment and once treatment has commenced. For the former, service users were assigned to one of the following groups: i) entered treatment ii) disengaged following assessment, iii) deemed unsuitable for treatment. The ‘entered treatment’ group were those who went on to have at least 1 treatment session or had been assigned the IAPT end code ‘referred to another therapy service by mutual agreement’ following the initial assessment. The ‘disengaged following assessment’ group were those who had
been assigned the IAPT end code ‘suitable for IAPT service but declined treatment that was offered’. The ‘deemed unsuitable for treatment’ group were those who had been assigned the IAPT end code ‘not suitable for IAPT service – no action taken or directed back to referrer’ or ‘not suitable to IAPT services – signposted elsewhere with mutual agreement of patient’. For the treatment completion outcome, service users who had received at least 1 treatment session were assigned to one of the following groups: i) completed treatment ii) disengaged from treatment iii) referred elsewhere. The ‘completed treatment’ group were those who had been assigned the IAPT end code ‘completed scheduled treatment’ or ‘stepped up from low intensity IAPT service’ or ‘stepped down from high intensity IAPT service’. The ‘disengaged from treatment’ group were those who had been assigned the IAPT end code ‘dropped out of treatment’. The ‘referred elsewhere’ group were those who had been assigned the IAPT end code ‘referred to non IAPT service’.

Covariates

Depression and anxiety symptom scores were included as continuous covariates in regression analysis. The Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001) is a nine-item self-report questionnaire measuring the severity of depression symptoms. Scores range from 0 to 27. Depression symptoms are classified as minimal (0-4), moderate (5-9), moderate (10-14), moderately severe (15-19), or severe (20-27). Scores of 10 or more are taken to indicate “caseness” (Kroenke et al., 2001). The Generalised Anxiety Disorder (GAD 7) (Spitzer et al., 2006) is a seven-item self-report questionnaire measuring the severity of generalised anxiety disorder. Scores range from 0-21. Anxiety symptoms are classified as minimal (0-4), mild (5-9), moderate (10-14) or severe (15-21). Within IAPT services a score of 8 or more is taken to indicate “caseness”.

Age data was recoded from date of birth to age in years and then used as a continuous covariate within regression analyses.
Statistical analysis

Frequencies and percentages are presented for all study variables. Multinomial logistic regression was conducted on STATA 15 (Statacorp, 2017) to explore associations between social status variables and service use outcomes. The full sample (n=9,904) was used to test associations with the assessment phase outcomes, a smaller sample (n=6,852) was used to test associations with the treatment phase outcomes. This drop in sample size reflected the need to remove the ‘assessment only’ group of men who did not proceed to treatment in order to answer the research question. Given the relatively low levels of missing data, ‘missing’ was created as an additional value for each categorical variable and included in the analyses so that missing values were not subject to listwise deletion by STATA software. The reason for this was to maximise the sample and to reduce the bias that would otherwise occur from listwise deletion. Imputation was not used given the relatively low levels of missing data and because it would have considered appropriate the prediction of characteristics such as sexual orientation in cases where it is missing using the data available. For this analysis, the following models were estimated: model 1 is unadjusted for each indicator; model 2 adjusts for potential age and symptom severity confounders for each indicator; model 3 further adjusts for all social status indicators.

Following this a latent class analysis (LCA) was conducted using Mplus.8 software (Muthén & Muthén, 2007). LCA is a well-established data driven method which classifies individuals into mutually exclusive ‘classes’ based on conditional probabilities (R. Andersen et al., 2003; Goodman, 1974). Individuals who are members of the same class will have a similar pattern of responses to the range of categorical variables included in the analysis. For this study ethnicity, sexual orientation, religious affiliation, and employment status were included. As is standard in Mplus, missing data was managed using Full Information Maximum-Likelihood
through the Expectation Maximisation (EM) algorithm (Dempster et al., 1977). Given that neighbourhood deprivation level represents an area, rather than individual level, variable it was not modelled in the LCA but was instead treated as a covariate alongside age in later regression models testing the association between the classes and service use outcomes. Considerable variation in socioeconomic circumstance exists within individuals living within the same LSOA which would complicate interpretation of class solutions. Had there been the option, the LCA would have included a measure of income, as this would likely have been a much better proxy for SES. However, information on income is not routinely collected by the services.

Goodness of fit statistics were used to guide decision-making regarding the optimal class solution to extract from the analyses (Nylund et al., 2007). These were the Akaike information criterion (AIC), Bayesian information criterion (BIC) sample-size-adjusted Bayesian information criteria (SABIC), entropy and the Vuong-Lo-Mendell-Rubin likelihood ratio test (VLMR-LRT). Comparatively lower AIC, BIC and SABIC values indicate better fit in LCA models. The entropy value ranges between 0 and 1 and measures classification accuracy, with values closer to 1 indicating better classification. The VLMR-LRT statistic compares model solutions. A p-value of > 0.05 indicates that the previous class solution fits the model better than the current one. To ensure results were clinically meaningful and numerically stable, the conventional restriction of needing at least 5% of service users in a class was also considered (Spinhoven et al., 2016). As there was no prior hypothesis regarding the number of expected classes, the analytical plan was to begin by conducting the LCA with a two-class solution, assessing it against the fit statistics and then increasing the number of classes until one or more of the parameters for best fit had been met.

Once the final class solution has been identified, further multinomial logistic regression was used to explore for associations between the LCA classes and the service use outcomes. Model 1 is unadjusted and model 2 adjusts for age, symptom
severity and neighbourhood deprivation level confounders. Finally, regression modelling was used to investigate for possible interaction effects between neighbourhood deprivation level and age and LCA classes on the service use outcome variables.

**Results**

**Sample characteristics**

Table 1 presents the characteristics of the male service users used for this study. The sample is diverse in terms of representation of ethnic minority groups (41%). Most men describe themselves as religious (60%) and heterosexual (93%). The majority of the sample live within neighbourhoods with high deprivation scores and the results suggest high rates of unemployment (33%) compared to the national average. Following an assessment, most men started psychological treatment (69%) with the remaining group either disengaging or being deemed unsuitable in roughly equal numbers. Only 39% of those service users who entered treatment completed the course, with the majority of the remaining, disengaging from treatment. This is figure is low in comparison to the national average of 53% for treatment completion amongst service users entering treatment in 2017-2018. However this may reflect a difference in the classification of treatment completion, with IAPT opting for a low threshold of service users having had a minimum of two sessions regardless of the reason the episode ended, whilst for this study, service users were additionally required to have been assigned related ‘reason for treatment ending’ IAPT codes.
Table 2: Sample characteristics

<table>
<thead>
<tr>
<th></th>
<th>n (%)</th>
<th>Employment</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Employed</td>
<td>6,502 (65.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unemployed</td>
<td>3,288 (33.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing</td>
<td>113 (1.1%)</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td>IMD (quintiles)</td>
<td></td>
</tr>
<tr>
<td>16-24</td>
<td>1,513 (15.3%)</td>
<td>1 (Least deprived)</td>
<td>271 (2.7%)</td>
</tr>
<tr>
<td>25-34</td>
<td>2,665 (26.9%)</td>
<td>2</td>
<td>870 (8.8%)</td>
</tr>
<tr>
<td>35-44</td>
<td>2,206 (22.3%)</td>
<td>3</td>
<td>1,915 (19.3%)</td>
</tr>
<tr>
<td>45-54</td>
<td>1,903 (19.2%)</td>
<td>4</td>
<td>3,301 (33.3%)</td>
</tr>
<tr>
<td>55-64</td>
<td>1,109 (11.2%)</td>
<td>5 (Most deprived)</td>
<td>3,277 (33.1%)</td>
</tr>
<tr>
<td>65+</td>
<td>507 (5.1%)</td>
<td>Missing</td>
<td>269 (2.7%)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td>Assessment phase</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>5,769 (58.3%)</td>
<td>Started treatment</td>
<td>6,852 (69.2%)</td>
</tr>
<tr>
<td>Asian</td>
<td>2,597 (26.2%)</td>
<td>Disengaged</td>
<td>1,483 (15.0%)</td>
</tr>
<tr>
<td>Black</td>
<td>902 (9.1%)</td>
<td>Deemed unsuitable</td>
<td>1,569 (15.9%)</td>
</tr>
<tr>
<td>Mixed</td>
<td>370 (3.7%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>184 (1.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>81 (0.8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sexuality</strong></td>
<td></td>
<td>Treatment phase</td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>9,234 (93.2%)</td>
<td>Assessment only</td>
<td>3,052 (30.8%)</td>
</tr>
<tr>
<td>Non-heterosexual</td>
<td>291 (2.9%)</td>
<td>Treatment completed</td>
<td>3,899 (39.4%)</td>
</tr>
<tr>
<td>Missing</td>
<td>378 (3.8%)</td>
<td>Disengaged</td>
<td>2,394 (24.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referred elsewhere</td>
<td>559 (5.6%)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td>Baseline severity</td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>3,609 (36.4%)</td>
<td>PHQ-9 mean (SD)</td>
<td>15.6 (6.4)</td>
</tr>
<tr>
<td>Christian</td>
<td>2,910 (29.4%)</td>
<td>Missing</td>
<td>51 (0.5%)</td>
</tr>
<tr>
<td>Muslim</td>
<td>1,695 (17.1%)</td>
<td>GAD-7 mean (SD)</td>
<td>13.7 (5.2)</td>
</tr>
<tr>
<td>Other</td>
<td>1,294 (13.1%)</td>
<td>Missing</td>
<td>59 (0.6%)</td>
</tr>
<tr>
<td>Missing</td>
<td>395 (4.0%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

85
Service use patterns by social status indictors

Table 2 and 3 present relative risk ratios (RRR), 95% confidence intervals (CI) and p-values to describe the relationship between different social status indicators amongst male service users.

Assessment phase

Across all models, Asian and Black men were at a higher risk of disengaging following assessment compared to White men (RRR=1.43 (95%CI=1.25, 1.63), p<0.001; RRR=1.28 (95%CI=1.04, 1.57), p<0.05). Non-heterosexual men were found to be at increased risk of disengaging than heterosexual men, however this association was attenuated in the adjusted models (p>0.05). Muslim men were found to be more at risk of disengaging than non-religious men, however this association was also attenuated in the fully adjusted model (p>0.05). Christian men were at a lower risk of disengaging from treatment compared to the non-religious men in the unadjusted and fully adjusted models (RRR=0.85 (95%CI=0.73, 0.99), p<0.05). In contrast no associations between socioeconomic indicators and disengagement were found in any of the models (p>0.05).

Unemployed men were more at risk of being deemed unsuitable for treatment than the employed men (RRR=1.82 (95%CI=1.61, 2.04), p<0.001). No other associations were found between the other social status indicators and being deemed unsuitable for treatment in the adjusted models (p>0.05).

Treatment phase

Having commenced treatment, Black and Asian men were found to be at higher risk of disengaging than completing treatment compared to the White men, however this association was attenuated for Black men in the adjusted models and for Asian men in the fully adjusted model (p>0.05). Non-heterosexual men were found to be less at
risk of disengagement but only when controlling for age and symptom severity covariates. Muslim men were found to be at an increased risk of disengaging than non-religious men across all models (RRR=1.30 (95%CI=1.02, 1.53), p<0.05). Men from the Other religion group were found to be less at risk of disengaging then the non-religious men, however this association was attenuated in the fully adjusted model (p>0.05). Unemployed men were at an increased risk of disengaging from treatment compared to employed men across all models (RRR=1.30 (95%CI=1.16, 1.47), p<0.001). Likewise, across all models those men living in the most deprived neighbourhoods were at greater risk of disengaging compared to those in the least deprived neighbourhood (RRR=1.78 (95%CI=1.36, 2.74), p<0.01). Men living in neighbourhoods in second least deprived quintile were at increased risk of disengaging from treatment, however this association was attenuated in the fully adjusted model.

Asian men were found to be at increased risk of being referred elsewhere than completing treatment compared to White men across all models (RRR=1.52 (95%CI=1.11, 2.09), p<0.01). No association was found between sexual orientation and being referred elsewhere (p>0.05). Men from the Other religion group were at increased risk of being referred elsewhere however this association was attenuated in the fully adjusted model (p>0.05). Unemployed men were at increased risk of being referred elsewhere compared to employed men across all models (RRR=2.31 (95%CI=1.90, 2.83), p<0.001). No association was found between neighbourhood deprivation level and being referred elsewhere (p>0.05).
### Table 3: Associations between social status indicators and service use outcomes following the initial assessment

<table>
<thead>
<tr>
<th>Assessment phase outcome variables</th>
<th>Disengaged following initial assessment</th>
<th>Deemed unsuitable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1 RRR 95% CI)</td>
<td>Model 2 RRR 95% CI</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Asian</td>
<td>1.52 (1.33, 1.72) ***</td>
<td>1.43 (1.25, 1.63) ***</td>
</tr>
<tr>
<td>Black</td>
<td>1.35 (1.11, 1.64) **</td>
<td>1.28 (1.05, 1.55) *</td>
</tr>
<tr>
<td>Mixed</td>
<td>1.15 (0.85, 1.56)</td>
<td>1.02 (0.75, 1.39)</td>
</tr>
<tr>
<td>Other</td>
<td>1.40 (0.94, 2.08)</td>
<td>1.23 (0.82, 1.86)</td>
</tr>
<tr>
<td><strong>Sexuality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Non-heterosexual</td>
<td>1.40 (1.03, 1.91) *</td>
<td>1.25 (0.92, 1.70)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Christian</td>
<td>0.77 (0.67, 0.89) ***</td>
<td>0.88 (0.76, 1.02)</td>
</tr>
<tr>
<td>Muslim</td>
<td>1.30 (1.12, 1.52) **</td>
<td>1.32 (1.13, 1.55) ***</td>
</tr>
<tr>
<td>Other</td>
<td>0.91 (0.75, 1.09)</td>
<td>0.98 (0.82, 1.18)</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1.07 (0.95, 1.21)</td>
<td>1.06 (0.93, 1.20)</td>
</tr>
<tr>
<td><strong>IMD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Most deprived</td>
<td>1.07 (0.75, 1.53)</td>
<td>1.04 (0.73, 1.50)</td>
</tr>
<tr>
<td>2</td>
<td>0.92 (0.62, 1.36)</td>
<td>0.90 (0.60, 1.34)</td>
</tr>
<tr>
<td>3</td>
<td>1.06 (0.73, 1.52)</td>
<td>1.04 (0.72, 1.51)</td>
</tr>
<tr>
<td>4</td>
<td>1.23 (0.86, 1.75)</td>
<td>1.18 (0.82, 1.69)</td>
</tr>
<tr>
<td>5 Least deprived</td>
<td>Ref</td>
<td>Ref</td>
</tr>
</tbody>
</table>

1 Reference group is ‘started treatment’ for both outcomes. * p < 0.05; **p < 0.01; *** p < 0.001 Model 1 unadjusted, model 2 adjusted for age and baseline symptom severity scores, model 3 adjusted for age, baseline symptom severity scores and all other social status indicators (ethnicity, sexuality, religion, employment and IMD).
Table 4: Associations between social status indicators and service use outcomes in the treatment phase

<table>
<thead>
<tr>
<th>Treatment phase outcome variables²</th>
<th>Disengaged from treatment</th>
<th>Referred elsewhere</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RRR 95% CI</td>
<td>p</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1.17 (1.04, 1.32) *</td>
<td>1.04 (0.92, 1.17)</td>
</tr>
<tr>
<td>Black</td>
<td>1.30 (1.08, 1.55) **</td>
<td>1.22 (1.02, 1.47) *</td>
</tr>
<tr>
<td>Mixed</td>
<td>1.22 (0.93, 1.60)</td>
<td>1.04 (0.79, 1.37)</td>
</tr>
<tr>
<td>Other</td>
<td>1.42 (0.97, 2.08)</td>
<td>1.30 (0.87, 1.86)</td>
</tr>
<tr>
<td><strong>Sexuality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td>Non-heterosexual</td>
<td>0.86 (0.62, 1.19)</td>
<td>0.70 (0.5, 0.97) *</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>0.90 (0.80, 1.02)</td>
<td>1.02 (0.90, 1.17)</td>
</tr>
<tr>
<td>Muslim</td>
<td>1.31 (1.13, 1.52) ***</td>
<td>1.24 (1.06, 1.44) **</td>
</tr>
<tr>
<td>Other</td>
<td>0.76 (0.64, 0.90) **</td>
<td>0.83 (0.70, 0.99) *</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>Ref</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>1.56 (1.40, 1.74) ***</td>
<td>1.37 (1.23, 1.54) ***</td>
</tr>
<tr>
<td><strong>IMD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Most deprived)</td>
<td>2.33 (1.65, 3.28) ***</td>
<td>2.09 (1.48, 2.98) ***</td>
</tr>
<tr>
<td>2</td>
<td>1.28 (0.88, 1.87)</td>
<td>1.26 (0.86, 1.85)</td>
</tr>
<tr>
<td>3</td>
<td>1.49 (1.05, 2.13) *</td>
<td>1.41 (0.98, 2.02)</td>
</tr>
<tr>
<td>4</td>
<td>1.87 (1.32, 2.64) ***</td>
<td>1.69 (1.48, 2.98) **</td>
</tr>
<tr>
<td>5 (Least deprived)</td>
<td>Ref</td>
<td></td>
</tr>
</tbody>
</table>

² Reference group ‘completed treatment’ for both outcomes. Results based upon analysis of reduced sample (n=6,852) because men from the ‘assessment only group’ were removed. * p < 0.05; **p < 0.01; *** p < 0.001. Model 1 unadjusted, model 2 adjusted for age and baseline symptom severity scores, model 3 adjusted for age, baseline severity scores and all other social status indicators (ethnicity, sexuality, religion, employment and IMD).
Class solutions

Goodness of fit statistics for the LCA are presented in Table 5. The AIC, BIC and SABIC values continued to diminish and the VLRT p-value remained significant (p<0.05) across all class solutions. Entropy was high (>0.968) for all solutions. The seven-class solution was selected for reasons of clinical utility given the class size in the eight-class solution fell below the 5% threshold. The classes are described in Table 6. Ethnicity and religion appear to most distinguish between class identities, whilst sexual orientation and employment distributions remain largely consistent across all classes, albeit with some relatively minor fluctuations.

### Table 5: Goodness of fit statistics for LCA models

<table>
<thead>
<tr>
<th>Class solution</th>
<th>AIC</th>
<th>BIC</th>
<th>SABIC</th>
<th>E</th>
<th>LMR-LRT p-value</th>
<th>% per class</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 class</td>
<td>78241.158</td>
<td>78406.774</td>
<td>78333.683</td>
<td>0.993</td>
<td>&lt;0.001</td>
<td>41/59</td>
</tr>
<tr>
<td>3 class</td>
<td>70927.880</td>
<td>71179.905</td>
<td>71068.680</td>
<td>0.968</td>
<td>&lt;0.001</td>
<td>37/34/30</td>
</tr>
<tr>
<td>4 class</td>
<td>66579.103</td>
<td>66917.536</td>
<td>66769.177</td>
<td>0.974</td>
<td>&lt;0.001</td>
<td>30/13/18/39</td>
</tr>
<tr>
<td>5 class</td>
<td>63903.408</td>
<td>64328.249</td>
<td>64140.756</td>
<td>0.978</td>
<td>&lt;0.001</td>
<td>21/13/18/33/15</td>
</tr>
<tr>
<td>6 class</td>
<td>61575.343</td>
<td>62086.592</td>
<td>61860.964</td>
<td>0.978</td>
<td>&lt;0.001</td>
<td>8/21/18/7/33/13</td>
</tr>
<tr>
<td>7 class</td>
<td><strong>60265.687</strong></td>
<td><strong>60863.344</strong></td>
<td><strong>60599.583</strong></td>
<td><strong>0.979</strong></td>
<td><strong>&lt;0.001</strong></td>
<td><strong>8/7/18/21/8/5/33</strong></td>
</tr>
<tr>
<td>8 class</td>
<td>59048.848</td>
<td>59732.914</td>
<td>59431.018</td>
<td>0.979</td>
<td>&lt;0.001</td>
<td>5/33/7/8/15/21/4</td>
</tr>
<tr>
<td>9 class</td>
<td>58345.413</td>
<td>59115.887</td>
<td>58775.857</td>
<td>0.980</td>
<td>&lt;0.001</td>
<td>6/5/21/3/15/33/6/8/4</td>
</tr>
<tr>
<td>10-class</td>
<td>57885.019</td>
<td>58741.902</td>
<td>58363.738</td>
<td>0.981</td>
<td>0.003</td>
<td>8/5/6/4/21/15/33/4/3/3</td>
</tr>
</tbody>
</table>
Table 6: Description of latent classes

<table>
<thead>
<tr>
<th>Class</th>
<th>n</th>
<th>‘Ethnicity, Religion’</th>
<th>Employed</th>
<th>Heterosexual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>3,241</td>
<td>‘White British, non-religious’</td>
<td>67%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>(32.7%)</td>
<td>Ethnicity: White British (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Non-religious group (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (67%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (96%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 2</td>
<td>665</td>
<td>‘BAME, non-religious’</td>
<td>61%</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td>(6.7%)</td>
<td>Ethnicity: Asian (38%), Black (32%), Mixed (22%), Other (8%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Non-religious group (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (62%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (95%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 3</td>
<td>1,782</td>
<td>‘Asian, Muslim’</td>
<td>62%</td>
<td>97%</td>
</tr>
<tr>
<td></td>
<td>(18%)</td>
<td>Ethnicity: Asian (80%), White (8%), Black (5%), Mixed (3%) Other (4%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Muslim (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (62%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (97%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 4</td>
<td>2,082</td>
<td>‘White British, Christian’</td>
<td>69%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>(21%)</td>
<td>Ethnicity: White British (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Christian (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (69%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (98%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 5</td>
<td>820</td>
<td>‘Asian, other religion’</td>
<td>71%</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>(8.3%)</td>
<td>Ethnicity: Asian (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Other religion (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (71%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (99%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 6</td>
<td>474</td>
<td>‘White British, other religion’</td>
<td>74%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>(4.8%)</td>
<td>Ethnicity: White British (80%), Black (7%), Mixed (6%) Other (6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Other religion (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (74%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (96%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 7</td>
<td>840</td>
<td>‘BAME, Christian’</td>
<td>65%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>(8.5%)</td>
<td>Ethnicity: Black (67%), Asian (12%), Mixed (18%), Other (3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Religion: Christian (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed: (65%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heterosexual: (98%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7: Associations between class groups and service use outcomes

<table>
<thead>
<tr>
<th></th>
<th>Assessment phase</th>
<th>Deemed unsuitable</th>
<th>Treatment phase</th>
<th>Referred elsewhere</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disengaged</td>
<td>Deemed unsuitable</td>
<td>Disengaged</td>
<td>Referred elsewhere</td>
</tr>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 1</td>
</tr>
<tr>
<td>Class 1</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Class 2</td>
<td>1.44 (1.15, 1.79)**</td>
<td>1.33 (1.05, 1.67)**</td>
<td>1.19 (0.94, 1.50)</td>
<td>1.15 (0.91, 1.46)</td>
</tr>
<tr>
<td>Class 3</td>
<td>1.45 (1.24, 1.69)***</td>
<td>1.43 (1.21,1.68)***</td>
<td>1.11 (0.94, 1.30)</td>
<td>1.08 (0.92, 1.28)</td>
</tr>
<tr>
<td>Class 4</td>
<td>0.77 (0.65, 0.91)**</td>
<td>0.89 (0.74, 1.06)</td>
<td>0.98 (0.84, 1.15)</td>
<td>0.99 (0.84, 1.16)</td>
</tr>
<tr>
<td>Class 5</td>
<td>1.13 (0.91, 1.40)</td>
<td>1.19 (0.95, 1.49)</td>
<td>1.15 (0.93, 1.42)</td>
<td>1.18 (0.95, 1.47)</td>
</tr>
<tr>
<td>Class 6</td>
<td>0.84 (0.63, 1.33)</td>
<td>1.04 (0.77, 1.40)</td>
<td>0.95 (0.72, 1.24)</td>
<td>1.04 (0.78, 1.39)</td>
</tr>
<tr>
<td>Class 7</td>
<td>1.14 (0.92, 1.42)</td>
<td>1.14 (0.92, 1.43)</td>
<td>1.18 (0.96, 1.45)</td>
<td>1.15 (0.93, 1.42)</td>
</tr>
</tbody>
</table>

|                  | Disengaged       | Referred elsewhere | Referred elsewhere |
|                  | Model 1          | Model 2            | Model 1            |
| Class 1          | Ref              | Ref               | Ref                |
| Class 2          | 1.23 (0.99, 1.53) | 1.17 (0.94, 1.47) | 1.27 (0.87, 1.86) | 1.16 (0.78, 1.72) |
| Class 3          | 1.38 (1.19, 1.60)*** | 1.32 (1.13, 1.54)** | 1.28 (0.98, 1.67) | 1.15 (0.87, 1.51) |
| Class 4          | 0.93 (0.80, 1.06) | 1.05 (0.90, 1.22) | 0.94 (0.73, 1.22) | 0.91 (0.69, 1.19) |
| Class 5          | 0.78 (0.63, 0.97)* | 0.86 (0.69, 1.07) | 1.73 (1.28, 2.34)*** | 1.68 (1.23, 2.30)** |
| Class 6          | 0.90 (0.70, 1.15) | 1.18 (0.90, 1.53) | 1.14 (0.75, 1.73) | 1.25 (0.81, 1.94) |
| Class 7          | 1.12 (0.92, 1.37) | 1.12 (0.92, 1.38) | 1.07 (0.75, 1.53) | 1.04 (0.72, 1.50) |

3 Reference group is started treatment.
4 References group is completed treatment.
*p <0.05; **p < 0.01; *** p < 0.001. Model 1 unadjusted, model 2 adjusted for age, baseline severity scores and neighbourhood deprivation level.
**Service use patterns by class groups**

The association between the classes uncovered in the LCA were then tested for association with the service use outcomes using multinomial regression analysis. The results are presented in Table 7 and described below.

Following assessment, men in the BAME, non-religious group (class 2) and Asian, Muslim group (class 3) were at increased risk of disengaging from treatment rather than starting treatment compared to those in the White British, non-religious group (class 1) (RRR=1.33 (95%CI=1.05, 1.67), p<0.05; RRR=1.43 (95%CI=1.21,1.68), p<0.001). In contrast White British Christian men (class 4) were found to be at lower risk of disengagement than starting treatment, compared to the those in the White non-religious group, however this associated was attenuated in the adjusted model (p>0.05). No associations were between class groups and being deemed unsuitable for treatment (p>0.05).

Having commenced treatment, men in the Asian Muslim group (class 3) are at increased risk of disengaging from treatment rather than completing treatment, compared to men in the White British, non-religious group (class 1) (RRR=1.32 (95%CI=1.13, 1.54), p<0.001). Men from the Asian, other religion group (class 5) were found to be at lower risk of disengaging than completing treatment, however this association was attenuated in the adjusted model. Men from the Asian, other religion group (class 5) were at increased risk of being referred elsewhere rather than completing treatment compared to men from the White British, non-religious group (class 1) (RRR=1.68 (95%CI=1.23, 2.30), p<0.01).
Interaction effects

Regression modelling was used to test for interactions between LCA class and the social status covariates of neighbourhood deprivation level and age. No significant interaction effects were found between neighbourhood deprivation level and LCA class on any of the service use outcomes (Appendix Table 2). A significant interaction effect was found for age and LCA class 7 (BAME, Christian men) in relation to being deemed unsuitable for treatment following the initial assessment (RRR=1.0011 (95%CI=1.0001, 1.0021), p<0.05). As illustrated in graph 1, the risk of being deemed unsuitable for treatment was significantly higher amongst young service users from the BAME Christian group compared to those in the White British, non-religious group (Class 1). No significant interactions effects between LCA class and age were found for any of the other service use outcomes (Appendix Table 2).
Graph 1: Interaction effects between age and LCA class group on being deemed unsuitable for treatment
**Discussion**

Drawing from a large diverse inner-city clinical sample, this study analysed men’s mental health service use using two different statistical methods. Findings from the initial regression analysis reveal considerable inequity in relation to the mental health service use of men. Being from an Asian or Black ethnic group, being Muslim, as well as being unemployed are characteristics associated with a discontinuation of service contact.

These results are consistent with trends apparent in previous research findings – that being from a minority ethnic group and being of lower socioeconomic status are associated with lower levels of service use (Alonso et al., 2007; P. E. Bebbington et al., 2000; Cooper et al., 2010, 2013; Raleigh et al., 2007). However, the results also go further to reveal that religion, a characteristic so rarely explored, is also an important sociodemographic characteristic for men’s mental health service use. That men self-identifying as Christian are *less* likely to disengage following assessment and those self-identifying as Muslim are *more* likely to disengage after commencing treatment, demonstrates a complexity to the relationship and the need for future research to disaggregate by religious group rather than rely on binary measurements of being religious or not.

Next LCA was conducted to identify meaningful subgroups of men which could be tested for association with mental health service use with the aim of providing a more multi-layered intersectional lens to understanding the patterns of inequity. As the author is unaware of any previous research attempting to use LCA to study sociodemographic and socioeconomic inequities in mental health service use, this was an exploratory endeavour. LCA identified seven subgroups of men which, when tested for association with service use outcomes, provided some further nuance to earlier results regarding religion and ethnicity. For example, where the regression analysis suggested Black and Asian men are at higher risk of
disengagement following assessment, LCA results suggest it is Asian Muslim men or men who are both non-religious and from a minority ethnic group who are more likely to disengage following assessment. Where the regression analysis suggests Muslim men are more likely to disengage from treatment, and Asian men are more likely be referred elsewhere, the LCA results suggest it is Asian Muslim men or men from the Asian other religion group, respectively. A post hoc interaction analysis revealed further heterogeneity within one of the classes. Younger men from the BAME Christian group were more likely to be deemed unsuitable for treatment than the White British, non-religious reference group. However, the results of the goodness of fit statistics suggest the models were imperfect in their fit to the data, and strong associations found in regression modelling between being unemployed and lower service use did not feature, meaning a potentially important source of disadvantage could be overlooked if the LCA had been the sole analytic model used. This reflects the challenge of attempting to apply statistical methods to intersectional questions.

The results from all analyses demonstrate a patterning of inequity that varied by outcome, both in terms of the stage along the treatment pathway, (be that following the initial assessment or following the commencement of treatment) and regarding the reason for discontinuation of clinical contact (be that a choice of the service user or clinician). This highlights the danger of flawed inferences being made about inequities in mental health service use where research utilises a simply binary service use outcome variable at one time point. For example, if early disengagement from the service had been the sole outcome here, the results would have appeared to have suggest that socioeconomic status is unrelated to men’s mental health service use. However, instead the findings suggest that being unemployed is not only associated with a higher risk of disengagement once treatment has commenced but is also consistently associated with discontinuation
due to clinician led decision-making (being deemed unsuitable and being referred elsewhere). This is of particular interest given the economic case for development of IAPT services was made on the basis that improving people’s mental wellbeing would have a positive knock-on effect to ability to find employment.

Whilst it is beyond the scope of this study to provide explanations for these disparities, the findings do make a clear case for the application of an intersectional lens to the study of men’s mental health service use. Possible avenues for future research include whether traditional notions of masculinity are more potent and therapy interfering for men at the intersections of certain social identities, thereby contributing to disparities such as those found here. Alternatively, it may be useful to move beyond the current emphasis on masculinity and refocus upon the understanding whether disadvantage conferred by occupying other stigmatised social identities may be undermining equity in service use and the extent to which this process varies by gender. Indeed an important question for any quantitative intersectional work is ‘what role does inequality play?’ (Cole, 2009), as this demands consideration of individuals embedded within a social context and the ways in which these categories have been constructed through ongoing socio-historical processes. Relevant here is consideration of Islamophobia as a growing phenomenon in many Western countries which negatively impacts not only Muslims but those who are assumed to be Muslim based upon their ethnicity (Samari et al., 2018). The results of a recent literature review on Islamophobia and health demonstrated associations between experiences of Islamophobia and poor mental health and a lack of health care-seeking behaviours, and noted a number of cases in which gender moderated the effects found (Samari et al., 2018). Whilst most studies were conducted in the U.S. and far less is known about the relationship in the UK context, recent concerns have been raised about challenges specific to the U.K. context. For example, the potential for the government’s Prevent programme to adversely affect therapeutic
engagement within IAPT services (Beck et al., 2019). Ostensibly designed to address ‘radicalisation’ across all political and religious groups, Prevent places a statutory obligation upon clinicians to report service users they deem at risk. The programme has left many in the Muslim community feeling unfairly targeted and has created wariness in speaking openly in therapeutic settings about their faith for fear of their beliefs being misconstrued as dangerous (Beck et al., 2019).

Despite inclusion being high on the stated IAPT agenda, the results here clearly suggest that more needs to be done to address disparities in service use. There is mounting evidence to suggest that delivering population specific mental health treatments can improve uptake and outcomes amongst underserved demographic groups including men (Sagar-Ouriaghli et al., 2019; Spendelow, 2015) minority ethnic groups (Benish et al., 2011; Stephani L. Hatch & Thornicroft, 2012; van der Boor & White, 2020) and those from the Muslim community (Mir et al., 2015). Results from a recent systematic review (currently under revision) found that whilst a range of adapted psychological interventions for BAME groups produce favourable outcomes compared to non-adapted interventions, culturally-informed organisational adaptations may be the most important (Arundell et al., submitted). Examples of culturally-informed organisational adaptations include changes designed to improve access into treatment, be that through increased community outreach and engagement or by providing more appropriate locations for services.

Since the collection of most of this study data, IAPT guidelines aiming to improve access and outcome equity for BAME service users have been developed (Beck et al., 2019). These include service-level changes needed to improve access in addition to suggestions made to increase engagement and treatment completion of BAME groups. These include increasing diversity within the workforce, ensuring therapists receive adequate training and supervision in cross-cultural competence and offering culturally adapted and culturally responsive therapies. The results of
this study provide further empirical justification for this guidance being implemented and evaluated for impact.

Arguably the results here also suggest the need for the focus of such guidance to be expanded to meeting needs of men, those from the Muslim community and those from at socio-economic disadvantage. However, caution is needed to ensure that in creating multiple sets of guidance, organised according to a single shared group membership, there is not an inadvertent, homogenising of other important social characteristics that may exist within the group. The findings here also highlight the importance of understanding the way in which social groups intersect to create subgroups at greater risk. For those with membership of multiple stigmatised identities, it may be that the relevance of different aspects of their identity varies in relation to their engagement with services. For example, it may be for some that experiences which stem from being a non-heterosexual Muslim man are what hinder engagement with services and, in comparison being from a minority ethnic group does not feel as relevant. It is important therefore that the current momentum towards developing guidance for tailoring services to be more inclusive of underserved groups is balanced against an equal emphasis of the continued need to assess and work flexibly with each clients uniquely differing values and needs (Dinos, 2015).

To the best of the author’s knowledge possible inequities in clinician decision making regarding suitability for IAPT treatment have not been considered previously within either research publications or the annual reports regularly published by NHS digital. The results here suggest this is an area that warrants further research. It is possible to speculate on some possible contributing factors to the disparities found in the current study. One possibility is that although analysis controlled for symptom severity levels, there may be other aspects of clinical presentations which vary systematically but are not being picked up upon in these measures (e.g. chronicity
of illness or substance use comorbidity) but which may become apparent during clinical contacts and indicate other services are better placed to meet the service user’s needs. For example, it is plausible that being unemployed may in this context be a proxy marker of increased complexity of need. However, given that service users who were referred to another clinical service for treatment were not included in the ‘deemed unsuitable’ group, this hypothesis may only apply as an explanation to the ‘referred elsewhere having started treatment’ group. Secondly certain groups of service users may be perceived as more ‘difficult to engage’, whether that be due to a lack of sensitivity on the part of the clinician to cultural variations in the expression of distress or whether certain groups of men struggle more than others with expressing themselves emotionally due the intersection of socialised notions of masculinity with other aspects of their identity. Unfortunately, information on where service users are referred on to, or reasons why a service user was deemed ‘unsuitable’ for treatment is not routinely collected by IAPT. Services may want to consider collecting this information in future to better understand such disparities. Finally, it may also be that these IAPT services receive higher rates of inappropriate referrals for these groups of men by other service providers, in which case further multi-agency working is warranted to streamline services and to save time and money for service users and providers. Incorporating referral source into any future analysis would help confirm or reject this hypothesis.

Study limitations

The generalisability of the study findings are limited because data was drawn from just two services located within two London boroughs. It is likely that patterns of inequity will differ by region reflective of the composition of the local populations being served. Furthermore given that research has shown the performance of individual IAPT services varies greatly and that organisational features such as waiting times and number of treatment sessions are associated with clinical
outcomes (Clark et al., 2018), it is plausible that there too could be variation in how services perform in regards to promoting inclusivity. Finally, it is possible that the results of this study may have been affected by excluding service users without outcome data. Significant differences were found between the group with missing outcome data to those without missing data (Table 1 appendix). However, given that the vast majority (94%) of the sample had outcome data, it is unlikely that excluding for this reason would have much effect on the results.

This study was limited to using variables derived from the data routinely collected by the services. There are several other unmeasured social demographic characteristics, such as migrant status and relationship status, that are of interest that may be available in alternative datasets. It should also be acknowledged that within any broadly defined ethnic group there is notable heterogeneity, for example by language and nationality. Although one of the strengths of this study stems from the use of an ethnically diverse dataset, the need to ensure sufficient power to detect effects and to optimise the chances of model convergence, meant that the ethnicity categories remained, by necessity, broad. Similarly, additional measures of socio-economic status (e.g. education and income levels) could have better reflected the complexity of the construct. It is acknowledged that the employed and unemployed groups used here encompassed considerable heterogeneity in circumstance. Finally, the outcome data was based upon the reason’s clinicians assigned to service users for their end of treatment. As such service users’ views are not represented in this study. Future research is needed which explores this topic from the service user perspective.

Finally, whilst the LCA identified subgroups of men, the class solutions appear to offer little differentiation on two variables - sexual orientation or employment status. As a result, the method presented in this analysis may be limited in its ability to provide insights into the intersectional relationships between
the full range of social status variables used and to this extent was only partially successful in its application. This may reflect a challenge inherent to using power-based statistics to detect intersectional groups which, by their nature, will have smaller case numbers than the larger categories they are derived from. Given that only 3% of the sample was non-heterosexual it is perhaps unsurprising that this group did not feature in the classes. The final LCA model choice was based upon the 5% threshold reflecting the need for clinical meaningful results; that none of the goodness of fit statistics indicated that the best fitting model had been found may reflect a broader challenge of using LCA to group this selection of socio-demographic indicators with socio-economic indicators. With the former being perhaps more distinct and therefore less likely to overlap than, for example, multiple measures of socio-economic status. An alternative approach would have been to include clinical indicators in the LCA. However, the aim here was to explore men’s mental health service use from an intersectional perspective which is concerned with uncovering power and disadvantage associated with different facets of social identity. The only other variable available which may have fitted conceptually, given its potential to confer to social disadvantage, was physical disability. However, given physical disability is primarily defined as a physical health construct with a biological basis, it is distinct from the other indicators used, which are primarily social constructs. To include physical disability would have therefore added considerable extra complexity, felt to be beyond the scope of the current thesis. It may be that LCA was not the most suited to this data structure, despite this method being used on similar samples and variables, and that alternative classification procedures such as CART or machine learning classification algorithms might have better ability to identify sub-groups based on lower frequency differences, but this is yet to be demonstrated in the field. For the current study, CART was not an analytical option as it is based upon binary outcome variables as it's starting point and so would have
been ill-suited to exploring the outcome variables of interest here, each with three values.

Conclusion

This study adopts a novel approach to investigating men's mental health service use from an intersectional perspective. Applying, and comparing the results of, regression modelling and LCA in relation to the service use of men by a range of social status indicators has not been attempted in the literature previously. Additionally, differentiating reasons for discontinuation of service use by service user and clinician led decision making, at multiple points along the treatment pathway, is novel within the quantitative literature and might better inform understanding within clinical services about disparities in service use. The results demonstrate inequities in the service use of men by ethnicity, religion, and markers of SES. Whilst the LCA provided some further detail of subgroups at risk of discontinuing from treatment by ethnicity and religion, employment status did not differentially feature within the classes. In contrast, being unemployed was found to be an important source of disadvantage in the results of the regression modelling. LCA may be better suited to uncover intersectional subgroups from a different range of variables, unavailable within the current dataset. The results suggest that further tailoring of services may be needed to reduce levels of disengagement in certain groups. The disparities found in relation to clinician led decision-making warrant further attention as this constitutes a relatively unexplored source of possible inequity of service use.
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Part 3: Critical Appraisal
Introduction

The final part of this thesis offers a critical reflection on the process of doing research for the doctorate in Clinical Psychology. Unusually this has involved work on two separate research projects. The first project became untenable within the doctorate time constraints due to the process of applying for NHS ethical approval, which necessitated the identification of a new project in my final year using secondary data. I will comment upon both experiences as I feel each have provided me with unique insight and learning about different stages in the research process and shaped my current view about the feasibility of working as a 'scientist-practitioner'. The appraisal will be structured chronically. I will begin by outlining my relevant academic and work experience prior to training and how this shaped the views I held regarding methodologies for measuring psychological distress and motivated me to pick the research topics I did. Next, I will reflect upon the process of applying for NHS ethics and challenges this presents for both trainee and psychologist led research. Finally, I will describe upon the decision to work on a secondary data project and reflect upon how this has prompted me to re-evaluate the previously ambivalent position I held in relation to the value of psychometric outcome data and, in doing so, has reinvigorated a commitment to contribute to developing clinically relevant research in the future.

Background context to the research

An early interest in the relationship between culture, health and illness was initiated through in my first degree in Social Anthropology and further developed during a subsequent year spent working on health promoting projects in economically deprived communities in South Africa. Upon return, I studied for an MSc in Public Health which introduced me to the social determinants of health literature and provided an academic/theoretical framework through which to reflect upon not only
my South African experiences but also to think more critically about the multicultural
inner city London borough I lived in and the impact upon the health and wellbeing of
residents of structural adversity across domains such as employment, housing and
healthcare. Subsequently I worked across several research studies including the
second phase of the South East London Community Health Study (SELCoH). This
was an epidemiological cohort study of randomly selected households in Southwark
and Lambeth. Phase 2 aimed to investigate the contribution of discrimination to a
range of physical and health inequalities (S. L. Hatch et al., 2016).

As a result of these combined experiences, I applied for the doctorate in
Clinical Psychology with a particular clinical interest in community psychology and a
strongly held conviction that support for people with mental health problems needs
to be holistic in its design. Aside from access to treatment, more recognition is
needed that mental wellbeing is inextricably linked to a person’s social and
economic location within their community and wider social structures due to the
privilege or disadvantage this confers to them. I also found the prevailing emphasis
across courses for the need to train Clinical Psychologists to embody the ‘scientist-
practitioner’ ideal appealing. The notion that research should be influenced and
shaped by first-hand experience of applied practice and vice versa felt like a
valuable and important pursuit.

Consistent with the clinical and research interests I embarked upon training
with, I originally opted to work on a project which aimed to investigate the cultural
variability of ‘expressed emotion’ (EE), a construct designed to measure the quality
of family relationships. High EE has repeatedly been found to predict higher relapse
rates for individuals diagnosed with psychosis (P. Bebbington & Kuipers, 1994;
Butzlaff & Hooley, 1998), a finding which has driven the development and roll out of
Family Interventions (FI) in the NHS, designed to reduce EE (P. Bebbington &
Kuipers, 1994). However, given that EE was conceptualised within the UK and most
research demonstrating a strong EE-relapse relationship comes from Western settings utilising predominately White samples, coupled with emerging evidence from cross-cultural literature of varying rates of EE and its relationship to clinical outcomes, there was mounting concern of the risk that without adaptation to interventions, services could be inadvertently pathologizing cultural variations of interpersonal expression. I conceptualised this as an issue of indirect systemic discrimination which could further perpetuate health inequalities. If clinical interventions are less relevant and valid for certain ethnic minority groups, they may have poorer clinical outcomes. As such I perceived the project as an exciting opportunity to be involved in developing worthwhile original clinical research.

**Reflections on applying for NHS ethical approval**

I joined that project, alongside another trainee, early on its conception and design. Decisions regarding which measurement tools to use and how best to recruit participants were yet to be made. Additionally, NHS ethical approval was required which I was aware made the project an ambitious one. Within previous research roles I had contributed towards ethics applications or amendments of existing proposals and so had some insight into how time-consuming the process is. However, the strong justification I felt there was for the project, coupled with the reassurance of both of my research supervisors and favourable opinion of the research proposal I submitted, led to me discard my concerns and move ahead with things.

Unfortunately, despite starting work on the application at the earliest opportunity and, at times, making it more of a priority than I had anticipated in relation to clinical and examination work demands, a year in, it became increasingly apparent that final approval for the project was likely to be granted significantly later than when we needed it given the time constraints of the course. The decision to leave the project and the realisation I would need to start afresh was incredibly
frustrating and anxiety provoking. It prompted a great deal of reflection about the NHS ethics process; a system of undeniable importance, but in practice, one which felt, paradoxically, unethical for a reasons of range of reasons. Furthermore, I also found myself thinking about whether, until change is made, it is appropriate for trainees to be allowed to pursue such high-risk projects particularly given the importance of managing the other clinical demands of the course.

Subsequent to this experience I have become aware a body of literature which critically evaluates NHS research governance processes and warns the scope for developing timely and cost-effective clinical research carried out in the NHS is being hindered by an excessively arduous research governance approval process (Petrova & Barclay, 2019; Thompson et al., 2008). Furthermore when it comes to student research, there is concern that, rather than leave trainees with a sense of confidence and expertise in setting up research, experiences of attempting to navigate the current ethics process during training, may discourage them from undertaking research beyond their clinical training (Brindley et al., 2020). There is recognition in the literature that attempts have been made to streamline the process of applying for NHS ethical approval in recent years. For example, where multi-centre investigations previously required permission from multiple local research committees, now a single online system exists meaning ethical approval gained in one part of the country is valid throughout the UK. However, there is also concern that these changes are tailored towards meeting the needs of larger research studies with more substantial resources and funding. In comparison, the smaller, unfunded studies and/or student projects are unlikely to feel any benefit from the changes, and may be at risk of being marginalised by the changes (Jonker et al., 2011). This is born out in decreasing numbers of ethics applications being made, with the figure of 9670 made in 2004/5 decreasing to 6321 made in 2009/10, in
contrast to multi-centre clinical trials showing an increasing trend in applications (Jonker et al., 2011).

These broader conclusions and concerns mirror much of my thinking at the time regarding how lengthy and time consuming the process was but were also triggered by other more specific frustrations. For example, instances where the conditions required for approval to be granted from the research committee which were at odds with Trust R&D policies – in one such case we were asked to do further patient participation involvement (PPI) by giving 10-30 service users and carers the study questionnaires to complete to check that overall what was being asked of them did not feel too onerous. This was an impossible task to carry out as it essentially represented a request to pilot the study in services prior to acquiring ethical approval which the Trust R&D representative would not grant permission for.

One recent change which has scope to aid smaller/student research studies has been the establishment of the Proportionate Review Service (PRS) available for review of studies which raise ‘no material ethical issues’. Under the PRS, the application process is accelerated by virtue of the review being conducted by a sub-committee rather than requiring a full meeting of an NHS Research Ethics Committee. Our study qualified for this and we appreciated for the quicker turnaround times granted. However, one of the features of this new system is that there is no option for applicants to attend the review meeting. The guidance states instead that it is at the discretion of the reviewers to contact the Chief Investigator by phone or email during the meeting should they feel this would help the sub-committee reach their decision. As such, students are entirely excluded from the review meeting which felt disempowering to myself and my fellow trainee colleague as we had co-led on the process to date.

The feelings of powerlessness, frustration and anxiety I describe were sentiments shared by other Clinical Psychology trainees in a recent qualitative study...
exploring the experience of going through the research ethics application process (Brindley et al., 2020). Interestingly all participants described a ‘them and us’ dynamic between ethics committees and themselves reinforced by miscommunication and misunderstanding. This resonates strongly with my experiences especially in relation to feeling excluded from the review meeting. Another interesting consequence of the process described that resonated for me was how students often coped with the strong emotions evoked by the process by devaluing the process and having the urge to discourage others from applying for NHS ethics. Upon reflection I now recognise that my view of the process during that time became increasingly negative. Had I been asked by first year trainees whether to pursue a project requiring NHS ethics I most certainly would have warned against it; a further issue highlighted by Brindley et al (2020) whereby negative discourses on training programmes may foster unhelpful stereotypical views of ethics committees. I suspect now that I reached a point where my frustration may have clouded my ability to see any value in the process and to acknowledge that some of the feedback we had was useful and prompted discussions which clarified important aspects of the study. I can see how I likely played a role in perpetuating the ‘us and them’ dynamic I sensed due to the burn out I was feeling. Brindley et al (2020) also draw attention to the possibility that ethics committees may hold stereotypical views of student researchers and the likely value of the projects they submit. One of the suggestions made is for local research committees and training courses to build closer working relationships via sharing of training resources and representatives from each group meeting to reflect upon possible mutually beneficial changes to the systems to foster a sense of working together rather than against one another resolve ethical dilemmas.

Changing project at a late stage naturally involved meeting with course staff to seek guidance. I became aware through these interactions that there was a
perception that the numbers of students completing projects which had required NHS ethical approval was decreasing year on year. I remember staff initiating discussions with me regarding the conundrum of whether this trend should be accepted or even encouraged to safeguard trainees from taking on overly ambitious projects or whether the course should be doing more to attempt to tackle this downward trend, be that through seeking avenues to feed back the challenges the process posed for the feasibility of trainee research projects and/or whether there were changes the course could make to better enable students to be successful in projects requiring NHS ethics approval. At this stage I was leaning towards the position that until research governance processes are better designed to suit the needs of smaller research projects, the course should warn students off embarking on projects needing ethics. I remember feeling jaded about the feasibility of Clinical Psychologists working in stretched NHS services ever being in the position to set up research given the volume of work involved in gaining approval.

Having had some distance and time reflect, I now feel to it seems important to take steps to push back against this trend. Not only to avoid the missed opportunity this would otherwise constitute for students to contribute to developing important clinical knowledge, but also because if Clinical Psychologists are to play a role in developing research, gaining experience in setting up research, including the navigation of research governance process is an integral part of this and arguably of comparable importance to developing other data collection and analytical research skills. However, I have reflected that more could be done at the course structural level to increase the chances of those trainees taking on higher risk projects requiring NHS ethical approval being successful and to safeguard them against feeling overwhelmed with additional work at a time when there are numerous other important assessment and clinical demands being made of them. Firstly, the time window required for applying for and receiving all necessary permissions and
carrying out data collection often far exceeds that which a trainee has. The current timetable set by the course is for projects to be selected in term 2 of the first year with the first task required of students to write and submit a research proposal which is then checked and signed off in the autumn of the second year. Were this process to be initiated earlier at the start of the first term this would give students an additional 6 months. At the point of picking a project, students could be given teaching on the research governance process to aid them to make informed decisions about whether to take on a project requiring NHS approval. Students could be made aware that work upon ethics applications should begin as early as possible and consideration by the course could be given to whether for these projects, an earlier submission of an abbreviated research proposal could be offered to allow work to commence without delay. Especially in cases where studies may be deemed riskier by ethics boards, the course could ensure that supervisors have recent and comprehensive experience of the ethics application process, to safeguard against that possibility that they may otherwise inadvertently underestimate the volumes of work and timescale involved when planning project work with trainees. Furthermore, another safeguard for trainees may be for supervisors to only offer projects for which an ethics application is already underway or in circumstances which the supervisor is able to commit time to developing it alongside the student also.

**Secondary data analysis**

The relatively tight time frame I had left to complete a new research project necessitated that I find one using a secondary dataset. Knowing that finding a quantitative dataset was more likely to find than a qualitative one, my main concern was whether I would be able to conduct more complex statistical analysis, as is required for secondary data projects, given my limited experience of using statistics. However, equally at that point, secondary data (for which there was no outstanding
ethics application required) also felt in many ways like a relatively safe and predictable option against the backdrop of my experience to date, (and future experiences had we have gotten to the stage of data collection which comes with much uncertainty). I was incredibly fortunate to be offered the opportunity to work on the current database with the supervisor I have had. In addition, I realised early on when considering the direction for the research that there was scope to shape the work in line with a social inequalities framework which was comfortingly familiar to me but also exciting as it reignited the interests I entered training with but which, I realised, had somehow fallen by the way side.

**Reflections on the value of routinely collected outcome data**

My opinion regarding the value of routinely collected outcome data has been influenced by my work on the current study. Reflecting now, I can see that prior to training I was ambivalent about the value of regular monitoring of client's progress via psychometric measures. My main experience of using such tools to capture symptom severity had predominately been within research rather than clinical contexts. The data gained from the semi-structured diagnostic assessment interviews I conducted alongside these questionnaires was comparatively rich in its capture of participants complex three-dimensional subjective experience. Furthermore, through the process of repeatedly conducting the same interviews with multiple participants I became acutely aware of the idiosyncratic way in which questions were interpreted and responded to and the need to use follow up questions to clarify responses. I had a reasonably solid grasp at this stage of the relative advantages and disadvantages of quantitative versus qualitative methodologies and held an overall position that mixed methodology probably provides the best approach to studying social phenomena. I felt the notion that someone’s distress or ‘recovery’ can be captured through numerical data seemed a reductionist positivist position which reflected the continued dominance of the
biomedical approach to defining distress as disorder despite all the known empirical and conceptual limitations of psychiatric diagnosis. My sense was that this was an area which demanded that services employ methods, at least in equal measure, which are consistent with the interpretivist perspective which prioritises the client’s subjective narrative.

My burgeoning scepticism was reinforced through a noticeable lack of enthusiasm by supervisors and colleagues towards using psychometric questionnaires on some of my early placements. They seemed to represent yet another administrative task which clinicians were duty bound to complete rather than an exercise which they felt offered much inherent clinical utility. My first-hand experience has been that too often the process of completing questionnaire measures have left clients feeling frustrated that there did not seem to be a box to tick that represented their true answer. For others, where language barriers meant interpreters were needed, I became frustrated at how time-consuming completion of questionnaires could be. Additionally, there have been times when the change in a client’s score post intervention has failed to show ‘clinically significant change’ despite the client describing changes that have felt meaningful to them. One such case which stands out for me was a client who had asked to see his scores, and when hearing that there had only been a slight reduction, felt bad that he had not ‘done better’.

Working on this study however has prompted me to re-examine my position. I continue to believe that psychometric outcome measures are imperfect and that it is problematic if they constitute the sole or dominant way of measuring a client’s progress, be that for service performance and or intervention evaluation purposes. However, in a way reminiscent of how intersectionality proponents see the value of quantitative methods, despite their reliance on problematic social categorisation, to uncover the relationships of inequality exist among social groups, equally I now see
the role outcome data can play in achieving a socially progressive agenda of tackling inequality and inequity in mental health provision. Being able to control for need was essential to this study as was having a large sample with low numbers of missing data. It allowed me to uncover patterns of inequity in service use by men which could be used to inform future research aiming to provide explanation for the disparities and suggests which groups of men may require additional clinical consideration to increase their chances of completing treatment.

Throughout my training I have become very aware of how stretched services are and the pressure that exists for clinicians to manage heavy caseloads. This is a challenging environment for Clinical Psychologists to maintain the ‘scientist-practitioner’ position. As such it seems vital that the full range of research opportunities and value of routinely collected data is fully comprehended within teams because creating space to collect additional data to what is required by the service may be unrealistic. Equally, considering what type of data is routinely collected is important; making the case for a more equal balance between psychometric measures and capture of qualitative feedback would not only provide a more wholistic picture of clients distress and progress but may improve clients and clinicians experience and willingness to engage fully in the process.
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# Appendices

Table 1: Comparison of social status characteristics of those with and without outcome data

<table>
<thead>
<tr>
<th></th>
<th>Study sample</th>
<th>Missing DV data</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td>9,904 (94%)</td>
<td>637 (6%)</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>16-24</td>
<td>1,513 (15.3%)</td>
<td>112 (17.6%)</td>
<td>0.025</td>
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<tr>
<td>25-34</td>
<td>2,665 (26.9%)</td>
<td>177 (27.7%)</td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>2,206 (22.3%)</td>
<td>162 (25.4%)</td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>1,903 (19.2%)</td>
<td>100 (15.7%)</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>1,109 (11.2%)</td>
<td>55 (8.6%)</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>507 (5.1%)</td>
<td>32 (5.0%)</td>
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</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>5,769 (58.3%)</td>
<td>280 (43.9%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Asian</td>
<td>2,597 (26.2%)</td>
<td>253 (39.7%)</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>902 (9.1%)</td>
<td>49 (7.7%)</td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td>370 (3.7%)</td>
<td>25 (3.9%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>184 (1.9%)</td>
<td>21 (3.3%)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>81 (0.8%)</td>
<td>10 (1.6%)</td>
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</tr>
<tr>
<td><strong>Sexuality</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>9,234 (93.2%)</td>
<td>573 (89.8%)</td>
<td>0.001</td>
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<tr>
<td>Non-heterosexual</td>
<td>291 (2.9%)</td>
<td>22 (3.5%)</td>
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<tr>
<td>Missing</td>
<td>378 (3.8%)</td>
<td>43 (6.7%)</td>
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<tr>
<td><strong>Religion</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>No religion</td>
<td>3,609 (36.4%)</td>
<td>238 (37.3%)</td>
<td>&lt;0.001</td>
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<tr>
<td>Christian</td>
<td>2,910 (29.4%)</td>
<td>128 (20.1%)</td>
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<tr>
<td>Muslim</td>
<td>1,695 (17.1%)</td>
<td>154 (24.1%)</td>
<td></td>
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<tr>
<td>Other</td>
<td>1,294 (13.1%)</td>
<td>101 (15.8%)</td>
<td></td>
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<tr>
<td>Missing</td>
<td>395 (4.0%)</td>
<td>17 (2.7%)</td>
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<td><strong>Employment</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Employed</td>
<td>6,502 (65.7%)</td>
<td>436 (68.3%)</td>
<td>0.056</td>
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<tr>
<td>Unemployed</td>
<td>3,288 (33.2%)</td>
<td>189 (29.6%)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>113 (1.1%)</td>
<td>13 (2.0%)</td>
<td></td>
</tr>
<tr>
<td><strong>IMD (quintiles)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Least deprived)</td>
<td>271 (2.7%)</td>
<td>25 (3.9%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>2</td>
<td>870 (8.8%)</td>
<td>88 (13.8%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1,915 (19.3%)</td>
<td>167 (26.2%)</td>
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</tr>
<tr>
<td>4</td>
<td>3,301 (33.3%)</td>
<td>209 (32.8%)</td>
<td></td>
</tr>
<tr>
<td>5 (Most deprived)</td>
<td>3,277 (33.1%)</td>
<td>124 (19.4%)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>269 (2.7%)</td>
<td>25 (3.9%)</td>
<td></td>
</tr>
<tr>
<td><strong>Baseline severity score</strong></td>
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<td></td>
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</tr>
<tr>
<td>PHQ-9 mean (SD)</td>
<td>15.6 (6.4)</td>
<td>14.8 (6.5)</td>
<td>0.002</td>
</tr>
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<td>Missing</td>
<td>51 (0.5%)</td>
<td>9 (1.4%)</td>
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<tr>
<td>GAD-7 mean (SD)</td>
<td>13.7 (5.2)</td>
<td>13.1 (5.5)</td>
<td>0.011</td>
</tr>
<tr>
<td>Missing</td>
<td>59 (0.6%)</td>
<td>9 (1.4%)</td>
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</table>

*p* values calculated using Pearson’s $\chi^2$ test for social status indicators. *p* values for symptoms scores were calculated using independent group t tests.
Table 2: Associations between class groups and service use outcomes, class groups intersected with age and service use outcomes, and class groups intersected with neighbourhood deprivation level and service use outcomes

<table>
<thead>
<tr>
<th>Class</th>
<th>Assessment phase</th>
<th>Deemed unsuitable</th>
<th>Treatment phase</th>
<th>Referred elsewhere</th>
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<tr>
<td></td>
<td>Disengaged</td>
<td></td>
<td>Disengaged</td>
<td></td>
</tr>
<tr>
<td>Class 1</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Class 2</td>
<td>1.33 (1.05, 1.67)*</td>
<td>1.15 (0.91, 1.46)</td>
<td>1.17 (0.94, 1.47)</td>
<td>1.16 (0.78, 1.72)</td>
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<tr>
<td>Class 3</td>
<td>1.43 (1.21, 1.68)***</td>
<td>1.08 (0.92, 1.28)</td>
<td>1.32 (1.13, 1.54)**</td>
<td>1.15 (0.87, 1.51)</td>
</tr>
<tr>
<td>Class 4</td>
<td>0.89 (0.74, 1.06)</td>
<td>0.99 (0.84, 1.16)</td>
<td>1.05 (0.90, 1.22)</td>
<td>0.91 (0.69, 1.19)</td>
</tr>
<tr>
<td>Class 5</td>
<td>1.19 (0.95, 1.49)</td>
<td>1.18 (0.95, 1.47)</td>
<td>0.86 (0.69, 1.07)</td>
<td>1.68 (1.23, 2.30)**</td>
</tr>
<tr>
<td>Class 6</td>
<td>1.04 (0.77, 1.40)</td>
<td>1.04 (0.78, 1.39)</td>
<td>1.18 (0.90, 1.53)</td>
<td>1.25 (0.81, 1.94)</td>
</tr>
<tr>
<td>Class 7</td>
<td>1.14 (0.92, 1.43)</td>
<td>1.15 (0.93, 1.42)</td>
<td>1.12 (0.92, 1.38)</td>
<td>1.04 (0.72, 1.50)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class and Age</th>
<th>Assessment phase</th>
<th>Deemed unsuitable</th>
<th>Treatment phase</th>
<th>Referred elsewhere</th>
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<tr>
<td></td>
<td>Disengaged</td>
<td></td>
<td>Disengaged</td>
<td></td>
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<tr>
<td>Class 1 x Age</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Class 2 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
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<tr>
<td>Class 3 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
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<tr>
<td>Class 4 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
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<tr>
<td>Class 5 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
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<tr>
<td>Class 6 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)</td>
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<tr>
<td>Class 7 x Age</td>
<td>1.00 (1.00, 1.00)</td>
<td>1.00 (1.00, 1.00)*</td>
<td>1.00 (1.00, 1.00)</td>
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<table>
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<th>Class and Neighbourhood Deprivation Level</th>
<th>Assessment phase</th>
<th>Deemed unsuitable</th>
<th>Treatment phase</th>
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<tr>
<td></td>
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<td>Disengaged</td>
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<tr>
<td>Class 1 x IMD</td>
<td>Ref</td>
<td>1.18 (0.94, 1.48)</td>
<td>1.06 (0.86, 1.32)</td>
<td>1.02 (0.71, 1.47)</td>
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<tr>
<td>Class 2 x IMD</td>
<td>0.95 (0.76, 1.17)</td>
<td>0.88 (0.75, 1.04)</td>
<td>0.91 (0.77, 1.06)</td>
<td>0.90 (0.68, 1.18)</td>
</tr>
<tr>
<td>Class 3 x IMD</td>
<td>0.89 (0.76, 1.05)</td>
<td>1.03 (0.89, 1.19)</td>
<td>0.91 (0.79, 1.04)</td>
<td>0.86 (0.68, 1.08)</td>
</tr>
<tr>
<td>Class 4 x IMD</td>
<td>1.10 (0.87, 1.40)</td>
<td>1.11 (0.88, 1.40)</td>
<td>0.84 (0.67, 1.06)</td>
<td>0.82 (0.60, 1.12)</td>
</tr>
<tr>
<td>Class 5 x IMD</td>
<td>0.94 (0.73, 1.21)</td>
<td>1.21 (0.93, 1.56)</td>
<td>0.97 (0.78, 1.22)</td>
<td>0.87 (0.61, 1.24)</td>
</tr>
<tr>
<td>Class 6 x IMD</td>
<td>0.83 (0.66, 1.04)</td>
<td>0.91 (0.73, 1.14)</td>
<td>0.97 (0.77, 1.20)</td>
<td>0.72 (0.51, 1.02)</td>
</tr>
</tbody>
</table>

Reference group for assessment phase is started treatment. References group for treatment phase is completed treatment. * p < 0.05; **p < 0.01; *** p < 0.001. Model 1 unadjusted, model 2 adjusted for age, baseline severity scores and neighbourhood deprivation level.